Infrastructure Finance
Prof. A. Thilai Rajan
Department of Management Studies
Indian Institute of Technology, Madras

Lecture - 27
Public Private Partnership

Welcome back to this course on Infrastructure Finance, this is lecture 27. And we will start this lecture on Public Private Partnerships, so far we had been talking about project finance markets. And this lecture will focus on public private partnerships and what are the various features of public private partnerships, there is something that we will look at in today's lecture. But before we do that, let us first discuss the thought questions that we actually discussed in the previous lecture.

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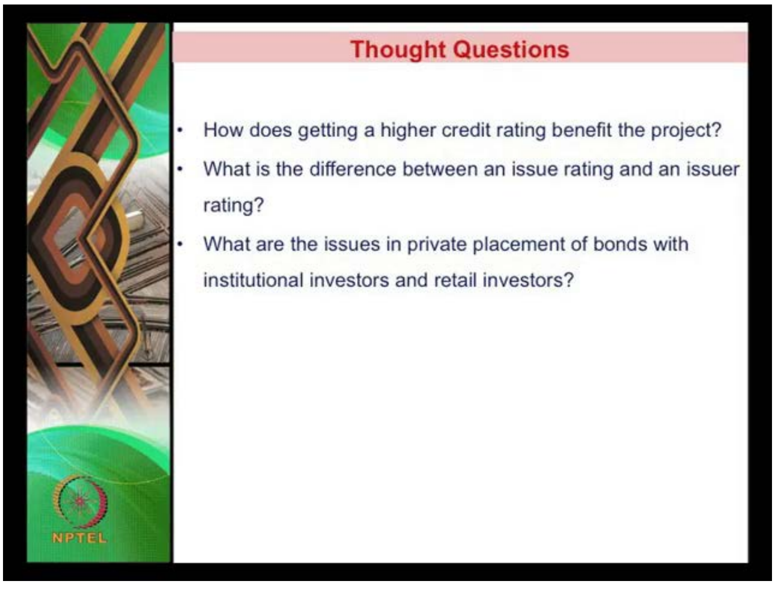

And the questions were, the first question is how does getting a higher credit rating benefit the project, so before we actually discuss the answer, let us for the time being ask the question how does one get higher credit rating. And is it something that can be obtained on a fee for example, can we actually give a certain amount of fees and then get a better credit rating from a credit rating agency. Or how do we actually go about get a higher credit rating, and for that we will have to first little bit understand about the credit rating process itself.

And the credit rating process starts first with a project company, approaching a credit rating agency and you know requesting them to do a credit rating of the project. And once the credit rating agency takes up the assignment, it requests for various information on the project from the project finance company. And the credit rating agency, then carefully studies all the material provided by the company and then it does certain amount of due diligence on it is own.

And it also has a various levels of personal discussions with the project company and then it comes out with what is called a preliminary credit rating. And once the agency assigns preliminary credit rating, then discusses with the company before a final rating is issued. So, during these meeting the company has the opportunity to respond to the various queries raised by the rating agency; and if the queries are resolved satisfactory, then it can potentially result in a higher credit rating.

So, essentially the rating process is a very careful study of the information provided by the company, analyzing the various risks, analyzing the financial cash flows of the project, analyzing the guarantees and the other support mechanism from the sponsor companies and so on, and based on that a credit rating is issued. So, for doing this process of rating, then the agency needs to be paid a fee and who pays the fee, the fees is actually paid by the project company.

So, the question now is, is it possible to actually get a higher credit rating by paying a higher fee, now that is not possible, irrespective of whatever rating is given the rating assignment itself has a fee, and that is what the project companies needs to pay. A better credit rating means, a better characteristics of the project that is a better risk management. Higher degree of comfort in terms of margins or in terms of support, in terms of guarantees, in terms of purchase agreement, supply agreements and so on, and so forth.

So, naturally if a project needs to be awarded, a higher credit ratings; that means, the project would have actually provided a lot of background works, in terms of mitigating the various risks involved in the project. And why would a project company do this kind of a additional effort for a better credit rating, so the benefit is a project that has higher credit rating, is able to raise capital at a lower cost. Simply put in a project loan, the interest on a project loan will be lower for a project with a higher credit rating, as compared to a project with a lower credit rating.

So, therefore, the cost of capital becomes lesser, if the credit rating is higher, so this is a very important advantage as far as getting a higher credit rating is concerned. So, the second question is, what is the difference a issue rating and an issuer rating, so we will again try and understand the difference between issue rating and issuer rating.

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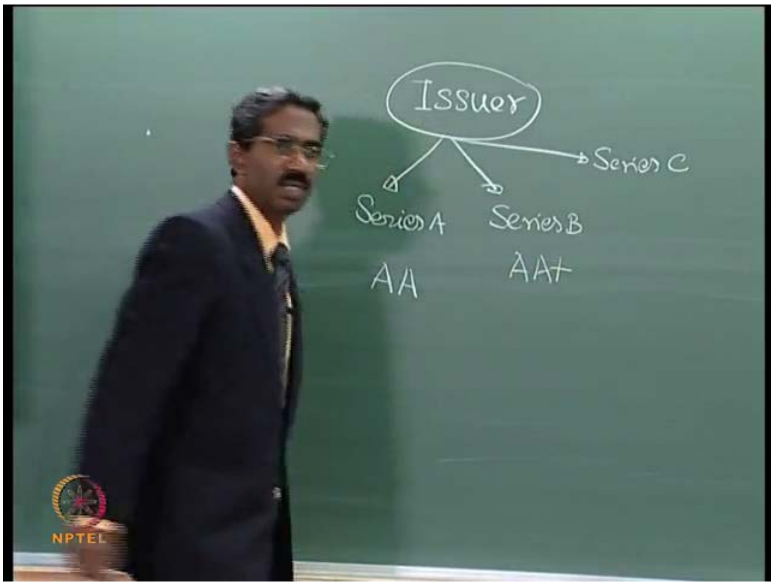

So, what is an issue rating, so issue, an issuer essentially it is an entity, it is a company and the company can actually issue various bonds. Say for example, an issuer can issue series A bonds, it can issue series B bonds, it can issue series C bonds and so on. So, each one of these issues will have it is own purposes, it is own characteristics so what, but all these three issues are being issued by the same issuer.

Now, agencies can also rate the issuer and whenever rating is done of the issuer, then it becomes a issuer rating, so an issuer rating is applicable across all the issues that is issued by the entity. So, let us say for example, if NTPC comes out with let us say four or five issues of bond offerings, and if an agency has done a credit rating of NTPC as an issuer, then the issuer rating is applicable across all the bond issues that NTPC comes out with, within a given time frame.

But, in the case of the issue rating that rating is specific for a particular issue, let us say for example, a series A issue has a rating of let say double A. So, this rating is specifically with respect to the various characteristics of the series A issue, in terms of how strong are the cash flows, in terms of how good is the risks going to be mitigated, in terms of what is the security that is being provided to the investors and so on, and so forth.

And on the other hand, series B issue can have a different credit rating for example, the series B can have a double A plus credit rating, because the issue characteristics might actually have more protection as compared to series A issue. So, this is a difference between a issue rating and an issuer rating, so as an investor you need to be very clear about the rating that you are seeing in a any particular issue, is it particular to that issue or is it a general issuer rating.

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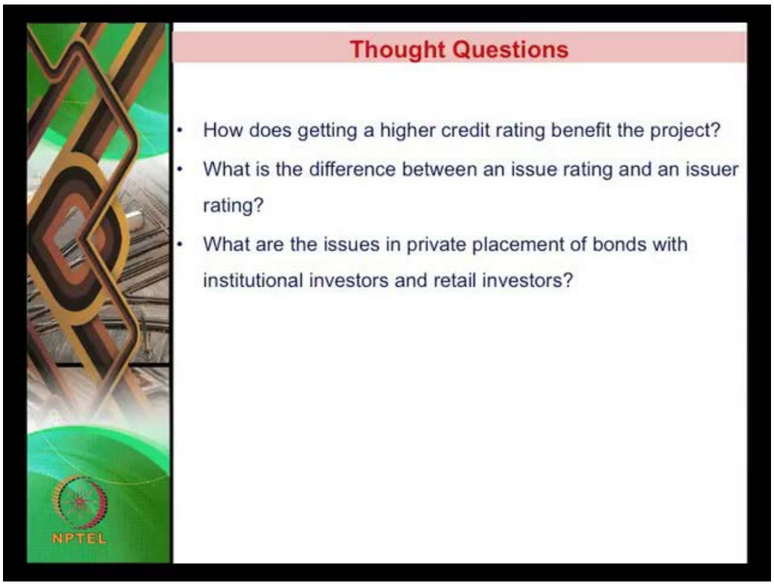

Now, third question that we asked is, what are the issues in private placement of bonds with institutional investors and retail investors.

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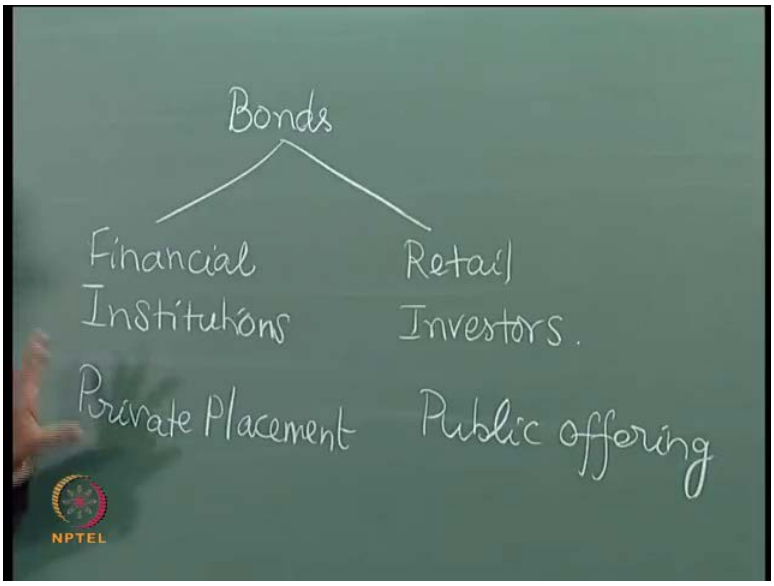

So, we talked about bonds, and we said bonds can be a privately placed with financial institutions, so this is institutional investors, financial institutions. And then we also have what is called as your retail investor, so when bonds are being sold exclusively to financial investors that is called as your a private placement, so this is called as you private placement. So, in the sense that, it is not available for the general public, only certain institutions that are contacted by, let us say the lean manager, the book runner will be in a position to subscribe to this bonds issue.

And when bonds are being issued to retail investors it is called as a public offering, because any members of the public can apply and subscribe to the bond offering. So, the question is which one should we actually go for, should we actually go for a private placement or should we go for a public offering. So, there are the features associates with either of those, and let us try and understand what are the various issues involved.

Let us say for example, when you are trying for a private placement, a private placement can be faster, because the people who are investing are all knowledgeable investors, and it is possible to conclude the transaction much faster as compared to making a public offering. In the public offering the compliance requirements are fairly strict, and very, very time consuming. So, therefore, one needs to actually be able to estimate and budget for the additional time required for a public offering.

So, the criterion is, if you want to actually raise certain amount of money quickly, then the best way would be to go for a private placement as compared to a public offering. Second in a private placement, since you are largely going to be dealing with banks or you are dealing with let us say large financial institutions, the way these institutions appraise a project might be very different from the way retail investors will look at.

So, these financial investors will take a long term view of the project, rather than what is basically the current, so it is possible to actually raise money for certain projects in private placement, as compared to the public offering. So, there is what is called as concept called hot market, sometimes when there is lot of changes in the market, but if they do not actually affect the project. Then it is going to be very difficult to raise a public offering; simply because of the fact that the market perceives as the conditions to be very unfavorable.

So, we have seen several conditions say for example, the beginning of the year 2000 there was what is called as East Asian crisis, so the Asian crisis was not pertained to any particular project, but it was largely towards entire economy. So, under the circumstances it was very difficult for the projects to raise capital from the retail investors, simply because those nobody willing to invest. So, it was like a contagion and the entire market was affected.

But, there was investment happening even though it was not very large, but there was investment happening in the private placement basis. So, when we want to actually, when your planning to actually raise money from the retail investors. You have to be aware of the fact that, if there is any sudden downturn in the market sentiments, it can actually affect the way in which you are going to raise capital.

The third is the comfort of, let us say book running lean manager or the investment banker, who is responsible for raising the capital. Now, it is generally felt that, the investment bankers find private placement a lot simpler, a lot easier, as compared to a public offering, because in the case of a private placement one needs to actually approach very small group of investors. And then try and raise capital, in the sense that the entire process become a lot more manageable.

And as compared to a public offering, were one needs to actually to a lot many road shows, will lead to actually reach out to a lot more players in the market. And raising money from a large number of investors is going to be a very, very; it is going to be very, very difficult. In a private placement market, it is also possible to get an estimate, in terms of what will be the interest rate that would interest the investors, and this will help us this will help the project in terms of making a very, very accurate cash flows in the initial stages.

But, in a public offering it is very difficult to get a feel for what is going to be the interest rate, because the interest rate that will be of interest to the investors will be determined, through a process of road shows that are going to be conducted. So, the actual cost at which we will be able to raise capital, is largely determined at very, very last phases and therefore, making very accurate estimations in the initial phases becomes little difficult.

On the other hand, there are some advantages in retail investors as well, is possible to raise very large sums of capital through retail investors. And it is also possible to raise very, it is also possible to raise debt with a very long tenure in the retail investor category. So, it is up to the book running lean managers, it is up to the projects to decide, how they would actually go about placing the bond issue, whether it is private placement or whether it is retail investors. There are advantages there are limitations for both, and it has to be very context specific, it has to be also dependent on the conditions of the market at the point in time the bonds are being issue.

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Now, let us look at the topic of today's lecture, which is public private partnerships, so if you are reading the newspapers you will actually find news items pertaining to public private partnerships, on a fairly regular basis. In fact, few days back I looked at the papers and it has screaming headline, which says the government goes into PPP mode to award massive infrastructure projects. So, PPP is a topic that is today capturing the attention of policy makers, that is today capturing the attention of government across all levels.

And government is very, very keen to implement specifically in the infrastructure sector, we have actually seen the reasons as to why this is the case in the first few lectures of this course. But, uniformly we get a feeling that governments want to actually engage in PPP mode more actively, so they are doing various ways in which this can happen, they are actually trying to formulate policies that encourage the use of PPP. If PPP is being used by state governments, there is an incentive that is provided by the central government, whenever they are following PPP framework.

And governments are also training a lot of officers within the government, so that they are aware of what is PPP, what are the various features of PPP, so that whenever a project comes for appraisal, they would be in a better position to decide, whether it can be implemented by PPP or not.

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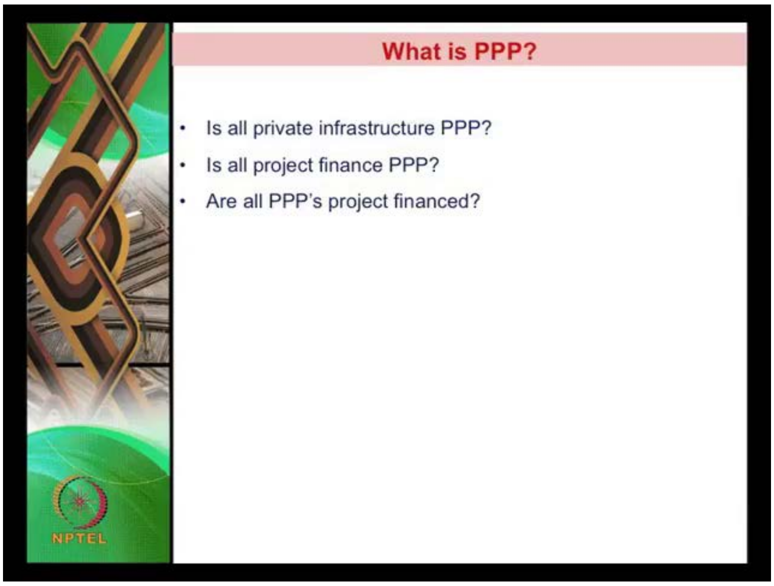

So, what is all this thing about PPP, PPP essentially the full form is Public Private Partnership, it is also sometimes called as three P's PPP, so therefore three P. So, we will try and get some very broad understanding of what is PPP first, before we get into the details, so the question is all private infrastructure PPP. So, when we look at the term PPP, it is public private partnership.

So, we can have several instances where the infrastructure projects may not really have any public sector participation, so many infrastructure projects can be entire a privately own, privately operated. So, in those case we do not really call them as PPP projects, let us look at the power sector, there are several power projects in the country which are exclusively own by the private sector. So, these are all projects, these are private projects, these are infrastructure projects, but these are not essentially PPP projects, so these are all not PPP projects.

So, PPP projects are essentially a subset of a larger private infrastructure projects, but at the same time all private infrastructure projects would not qualify to be called as PPP projects. So, the next question that we have is, is all project, finance projects PPP projects, so we have been dealing with project finance for several lectures now. So, are all the projects that are using project finance called PPP projects, the answer is no again; why because a various reasons.

First is project finance is not only seen in infrastructure sector, but generally speaking we also see it in several other sectors. So, therefore, a project finance is a very broader concept, and not all of them are actually public private partnerships, a public private partnerships are generally seen in infrastructure, all forms of infrastructure not only economic infrastructure, but also seen in social infrastructure so on.

But, all of them, all of the project finance projects are not again PPP, many of them can be exclusively private sector finance, let us say for example, today we have several power projects. We have GVK power, we have power projects executed by reliance, we have power projects executed by so many other players, even in the unconventional energy sources like solar and so on. So, these are all essentially private sector power projects and cannot be really called PPP projects.

Now, third question is are all PPP project finance, the answer to this question is yes, because PPP's are an entity on their own, they are entities that are clearly distinguished from their parent companies or from their sponsor companies. And in many instances PPP's are created with a specific purpose, either to create a separate project, either to operate a particular project and so on. So, therefore, any PPP project, that are being financed, is financed on a project finance basis.

So, when you look at broader form of PPP's, all of the PPP's generally speaking follow a project finance route, and that is why we have been looking at project finance in a fairly detailed way. Because, most of the PPP's that we seen in the infrastructure today, will essentially be following the project finance route, so that is just to get a conceptual clarity.

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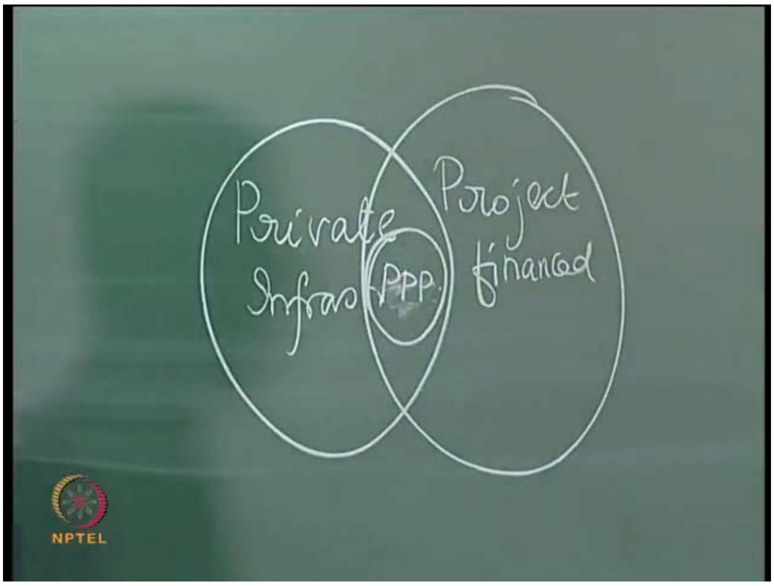

So, you have let us say a universal set of projects that are private infrastructure and then you have a set of projects that are project financed. And then you will actually have a small set within the intersection, which essentially be your PPP.

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What is a PPP? How do we actually describe PPP, so there are numerous definitions that are abound, but we will look at some very commonly understood definitions of PPP. Now, when you actually look at, text that talks about PPP, you might find an entirely new definition, and you might find several sets of definitions that compliments to whatever I am going to say in this lecture. So, nevertheless what I am trying to give you is a very common understanding of what PPP is all about.

So, the first point in the PPP is a contractual agreement of shared ownership, between a public agency and a private company. So, very clearly there are some important terms here that we need to be aware of, that is a contractual agreement of shared ownership. So, it is not ownership that is exclusively by the public agency or exclusively by the private company, it is a shared ownership between the public agency and the private company.

And the shared ownership is governed by a contractual agreement, and the contractual agreement clearly specifies their duties, their responsibilities of the different shareholders, the rights of the different shareholders and so on and so forth; so this is a very important element in a PPP. And because of this shared ownership, the public agency and the private company become partners, so they become partners of the entity, and as partners both of them pull resources together, and share risks and rewards to create efficiency in the production and provision of public or private goods.

So, the important thing is they pull resources together, so private sector will have some resources of it is own, the public sector will have some resources of it is own. Now, when I talk about resources, resources is simply not capital, capital is one resource, but then there are could be other types of resources as well for example, you can talk about expertise and you can talk about human resources. So, all of them are resources of one kind or the other, so each one of them pull resources that, they have or they are best at and they also share risks and rewards.

So, there are several types of risks the project has and the risks are shared between the different parties in the partnership, so each and every partner will share risk that they are best capable of managing. And they also share the rewards for example, the project is doing very well, then the rewards are shared between different partners and the objective of this is also to create efficiency in the production process.

So, how do you actually create efficiency, efficiency can be created in several ways, efficiency can be created in terms of promoting competition, efficiency can be created in terms of providing incentives for the partnership to function, in such a way that people are incentivized to do perform better and so on. In the provision of public or private goods, so the partnership can come together, either for a public good or either for a private good. So, it can actually be for let us say, for creation of public infrastructure like let us say transmission line or it could be in terms of setting up let us say, public school or it could be for certain private goods as well.

So, essentially we are talking about a partnership between a public agency and a private company. The second feature is when you really look at it, PPP are separate organizations on their own, rather than bargaining relationships; in a traditional public procurement what will you actually see.

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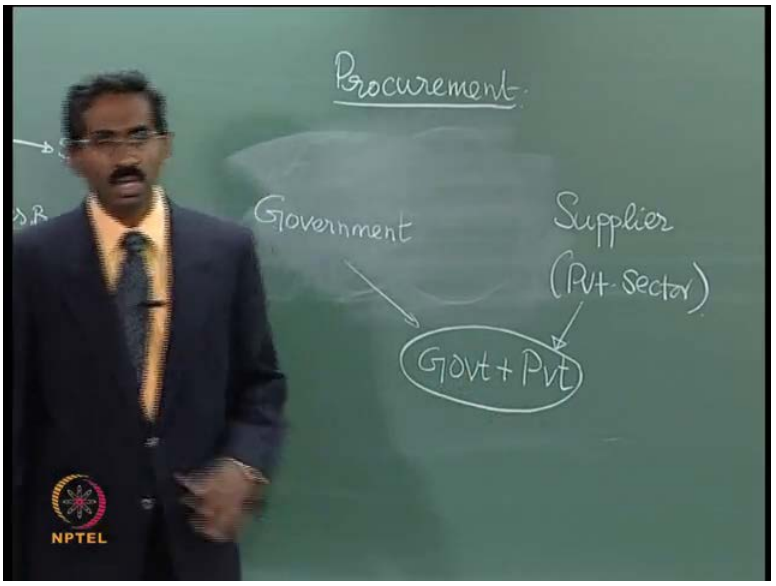

So, in a traditional procurement, so there is a government or let us say a public sector and government wants to actually, let us say procure some goods or services and then there is supplier, which is let us say the private sector. So, when the government wants to procure certain amount of goods or services, the government approaches the supplier and the supplier in turn provides the goods and services to the government. So, there are several ways in which the government can identify suppliers, it could be in terms of competitive bidding or it could be in terms of in a targeted identification of the supplier and so on, and so forth.

But, essentially what you actually find in a procurement kind of an activity is, they are distinct organizations on their own and then there is a lot of bargaining that happens between these two, so it is a bargaining relationship. So, the government and the supplier, they bargain with yeah with each other, so they are two separate organizations that continue to exist.

But, in a PPP what actually happens is, you actually create a separate organization, where you actually have both the government and the private coming together, we have both the government and the private coming together. To form a separate organization, ((Refer Time: 28:27)) this is a separate organization and it is not two separate organization as it was in the previous case of public sector procurement. And when they actually form a separate organization, they are not governed by the traditional bargaining relationship, because they are in a together and they will actually have to share the risk and rewards depending on the way they occur.

The main feature of a PPP is shared authority and responsibility, so in a traditional public sector procurement, the government actually has what is called as a lot of authority, the relationship is mostly one way. But, in a PPP there is a shared authority and there is a shared responsibility as well. And to ensure that there is commitment of both the organizations to the partnership, in most cases there is a joint investment that is sharing of liability and then there is a mutual benefit, so these are important cornerstones of a public private partnership.

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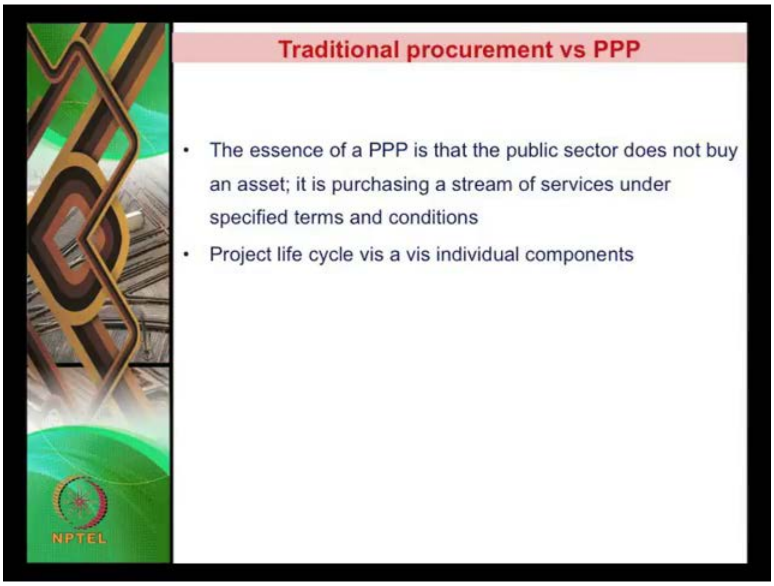

How does it differ as compared to a traditional procurement, so we need to actually understand this a little bit more detail, to appreciate the philosophy of public private partnership. In a traditional public procurement what happens, in a public sector essentially buys an asset, so the government wants to create, let us say the government should construct a power plant. And the government you know calls for a bid and then there are interested people who actually come, and they actually make a bid for constructing the power plant.

And then the government actually pays the price for the construction and then the government at the end of it all gets a power plant, so what actually happens in the end is the government gets a power plant, the government buys an asset, so that is a traditional procurement. The ownership of the asset rests with the public sector, whereas in a PPP what actually happens is, the public sector purchases a stream of services under some specific terms and conditions, instead of actually procuring an asset, instead of actually buying an asset in a PPP, government actually purchasing a stream of services.

If the same power plant is being constructed by the private sector, and if the government is actually purchasing the power from the power plant, then it is purchasing the services, it is not actually having the power plant as an asset, same is the case with the road project. If the public sector procures construction of road services from different construction firms, then after the suppliers have been paid off the road becomes that of the public sector.

So, it has actually bought an asset, it has actually constructs and develops an asset, but in a PPP what actually happens is the government procures transportation services from the PPP organization that has actually constructed the road. So, that is a very distinct difference and it is also what is called as a mindset change, the traditional mindset is to acquire an asset, but in a PPP the mindset is to actually acquire a service. We also have to really look at PPP as encompassing the entire project lifecycle, rather individual components.

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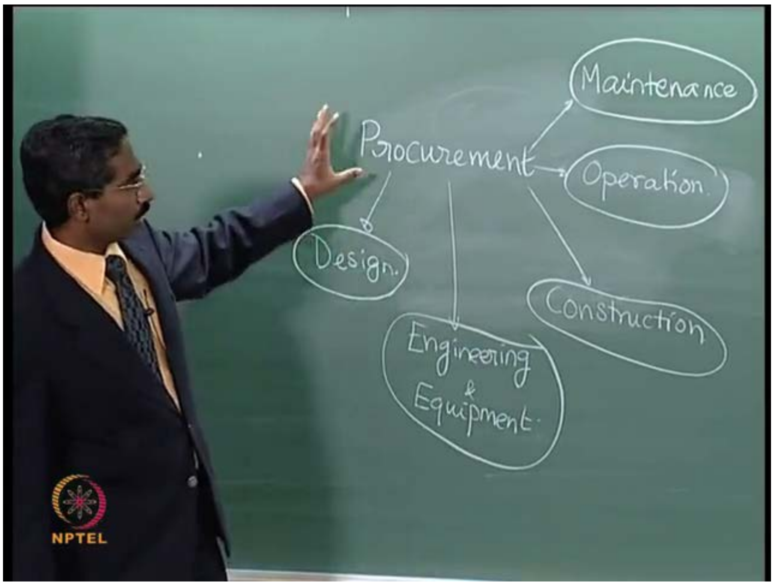

So, in a traditional procurement setup, what really happens there are different components to a project for example, you will have design and then you will have engineering, then you may actually have construction. And then you will actually have operations, and then you will actually have maintenance, it is a project can have a several components like this. So, let us say engineering and equipment as well, so in the traditional procurement system what would the government do.

So, the government engage as a vendor to provide design services, the government engages a vendor to provide engineering and equipment, the government engages a vendor for construction, the government engages a vendor for providing operations, and then engages a vendor for maintenance. So, essentially you will have multiple relationships that are going to be part of this part of this project process.

So, when you really have this multiple relationships, each one of them might not really look at are what is going to be happening after their involvement in the project is complete. So, for example, the construction can actually be focused on, how can they actually achieve or complete construction at the lowest costs, but a construction that is completed at the lowest cost might not necessarily be effective when it comes to operations, or it may not actually be effective when it comes to maintenance. So, a low cost construction might actually result in a higher maintenance, or it may actually result in a higher operation cost.

So, similarly when you look at design, a design that essentially provides for a low project cost, may not be actually very effective when it comes to overall maintenance in the longer term. So, each one of those project activities will be more concentrated on achieving low cost, for their individual components rather than looking at a project as a whole. Now, when you are talking about public private partnership, a public private partnership looks at all of this aspects pertaining to the project.

So, the project is responsible for achieving maximum efficiencies across all these segments, so when it is possible to look at the project as entire lifecycle, rather than the individual components. So, PPP is able to look at a design not in terms of low cost, but in terms of what is most effective through the entire project lifecycle; a project designed might be expensive, but then if it is actually result in corresponding benefits, in terms of low maintenance or most efficient operations.

Then there is actually better for the project for the lifecycle, it is most cost effective through the lifecycle rather than just being low cost up front. So, this is another difference between the traditional procurement and PPP, in a PPP one is able to look at across the project lifecycle, rather than looking at as individual components.

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Let us look at some of the distinguishing features of PPP, first let us look at participants. So, a partnership essentially means that, there are more than one entity otherwise, you are not in a partnership, and what kind of partnership we are talking about, we are talking about a public private partnership. So, in a partnership there has to be both a public as well as the private sector. So, there can be many partners, but at least one of them should be a public body, if there is no public body in the partnership, then obviously it cannot be called as a public private partnership.

So, this is an important at least one party in the partnership should be a public body, and in addition to being the part of the partnership, there has to be some kind of organizational commitment to be partnership, it is not you are just there for the sake of it, but you are committed to the success of the partnership, so that is very important. The second aspect is relationship, the partnership should be enduring and relational, so in a sense that there has to be some kind to relationship that has to be built, that has to develop in that arrangement.

Say for example, a public sector will essentially have different kinds of supplier, so if the public sector body were to use the same supplier year after year that relationship will still not be considered as a partnership. So, for example, let us say a government has an arrangement to, let us say provide, let us say lunch for the officers in the office, so even if the same vendor provides lunch for several years that will still not be a partnership kind of a relationship, it will still be a vendor kind of a relationship.

So, in a PPP we are looking at a relationship that is much more stronger and that is much more enduring. The third aspect is resourcing each of the partnerships must bring something of value to the partnership, the partnership has to sustain, there has to be an absence of what is called as free rider or a pillion rider. Each and every partner who is part of the PPP should bring something of value, so let us look at the example of the Bangalore International Airport.

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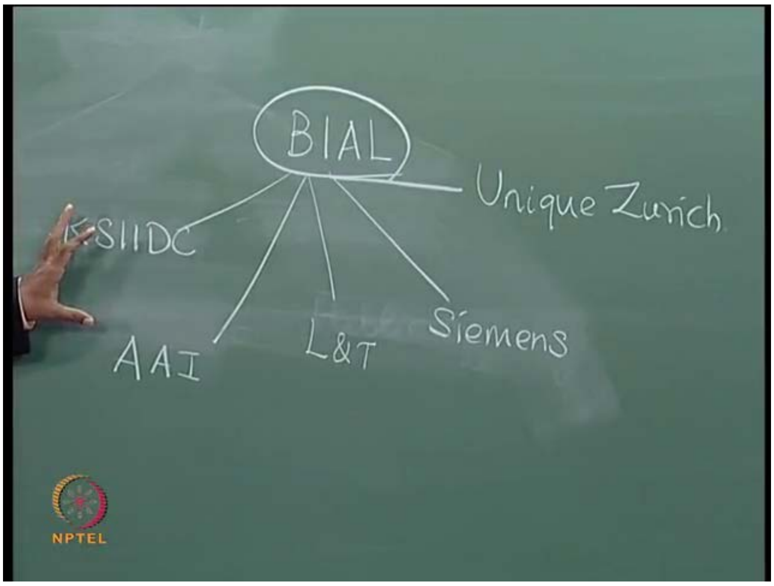

When the construction was awarded for Bangalore International Airport limited, there were the following shareholders in the partnership. So, there was KSIIDC, which was the organization of the government of Karnataka, then there was the airports authority of India and then we have Larsen and Tubro, then we had Seimens and then we had Zurich airport, we had Zurich airport. So, each one of the participants each one of the partners brought something of value to the project say for example, KSIIDC was able to actually coordinate the available of land for the project.

So, that is a very, very important element for the project, so KSIIDC was responsible for getting that land, in addition to getting facilitating various state governmental clearances, so it brought something valuable. Airports authority of India is an organization of central government, and airports authority of India is responsible for the traffic, is responsible for navigation services to the airport. So, they actually brought something in addition to several other support services they can, in terms of facilitating governmental clearances from the central government level.

Then we had L and T, L and T was responsible for the construction, so they brought something in terms of construction expertise for the project. And then we had Seimens, Seimens is the equipment supplier, so they actually brought in a value in terms of equipment for the project, and knowledge associated with operating the equipment for the project. Then you have Unique Zurich, Unique Zurich had experience had experience in terms of airport operations, and operating an airport is a lot more complicated than than many assets, than many other projects.

And that experience of airport operations is an important value to the partnership and they actually brought that value. So, if you look at each of the partners in the PPP, actually added certain amount of value, so this is very important this kind of resources bringing resources is very important in a PPP.

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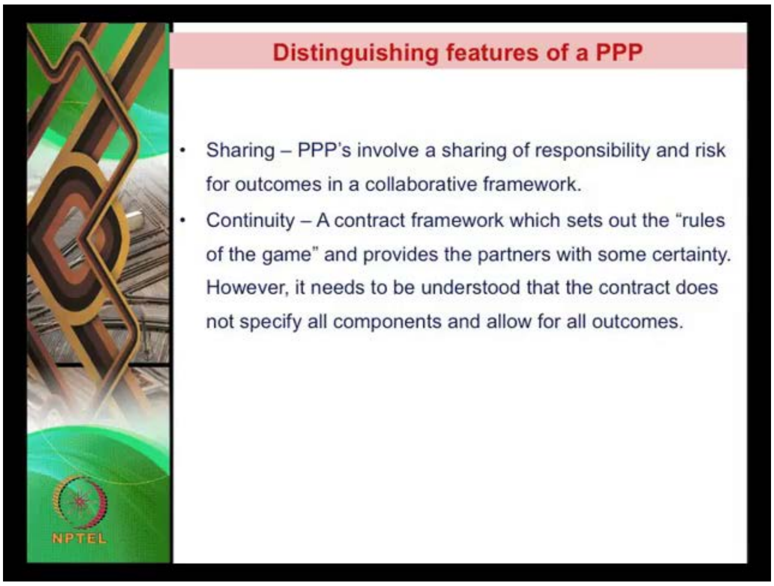

Sharing PPP's involve sharing of responsibility and risk for outcomes in a collaborative framework, so one has to be in a position to share the risks. So, each of them should be in a position to absorb the risk, which they are better suitable to manage for example, acquiring land for the project might be very difficult, for a private company like L and T or Seimens to absorb.

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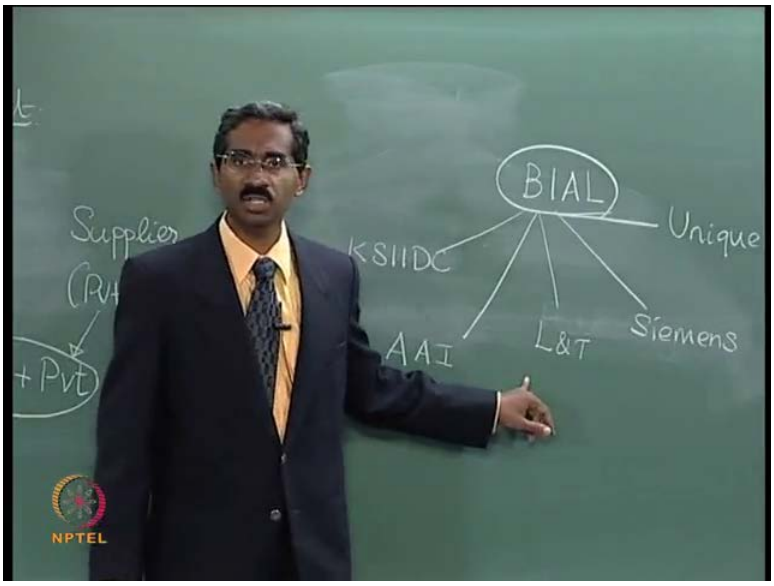

So, therefore, the responsibility for acquiring land, fell on KSIIDC, because they were best equipped to obtain the land for the project. Similarly, in terms of insuring operations, quality of operations was actually the responsibility of Unique Zurich, so there is a shared responsibility among the various partners.

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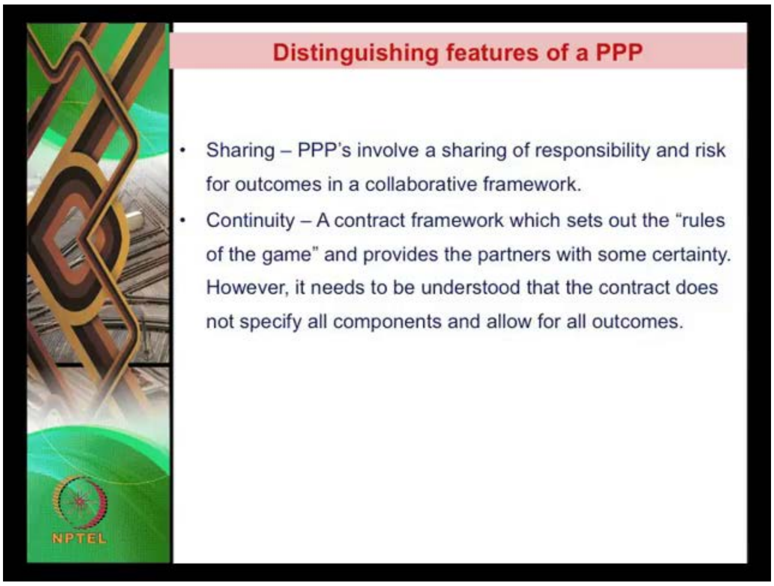

And we also have what is called as continuity that is a contract framework, which sets out rules of the game, so in essence it is kinds of avoids being exposed to the idiosyncrasies of the political environment. So, when there is a change in the political environment, then that can be substantial changes on the policy and so on. But, in an infrastructure project that is substantial investment that is made by the private sector, and this kinds of frequent change in the policies can actually affect the investment that has made in the past.

So, to be ensured that any policy changes does not affect the investments made in the past, there is a contractual framework that is actually governing the partnership. And this contractual framework sits out what is called as the rules of the game, what are the different rules and responsibilities of the different partners, under what circumstances can the license or the concession agreement be revoked and so on, and so forth.

While it needs to understood that, it is not possible to specify up front all of the outcomes and specify, what will be the result for each of the different cases. A general framework will give a lot more comfort to the private investors as compared to leaving many things open ended.

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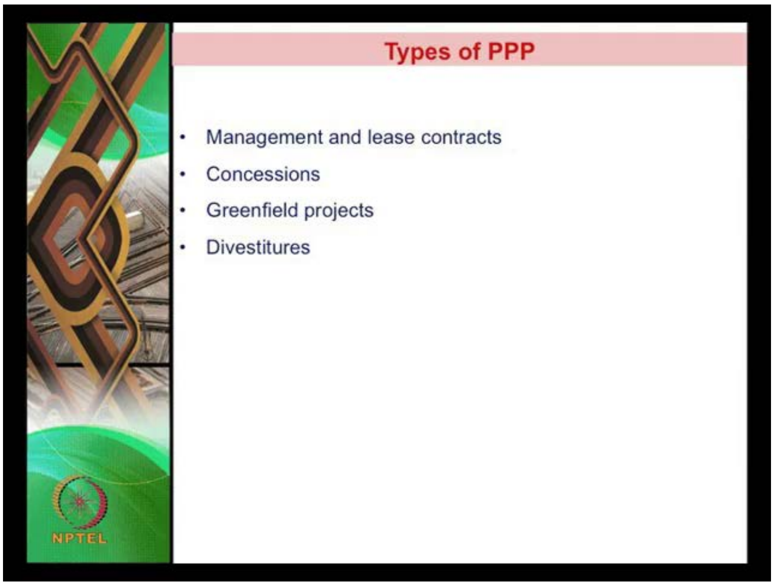

Broadly if you look at classification of PPP, they are classified in four categories, this is actually a classification that, is actually is been done by the world bank. So, the first is called as a management and lease contracts and so in a management contract, private sector management takes over the operations of a public sector entity. And public sector entity pays a fee to the private sector, for providing management services and the entire risk of operations is borne by the public sector.

So, there is a guaranteed fee that is provided by the public sector to the private operator, in a lease contract the facilities are leased and the private sector assumes a responsibility for managing the facility. So, in this case there is not fixed fee like we see in the case of the management contract, but the operational risk is actually borne by the private sector. So, if there is excess profits, the excess profits are actually shred by the private sector and the public sector, but at the same time there is no guaranteed fee income like in the case of a management contract.

So, the second type of PPP is called as concessions, the various build operate transfer, build own operate transfer, so the concessions that we normally have seen earlier, we talked about project structuring, they all also are some forms of PPP. And then we have a Greenfield projects, Greenfield where there is public sector participation for example, we talked about the Bangalore international airport.

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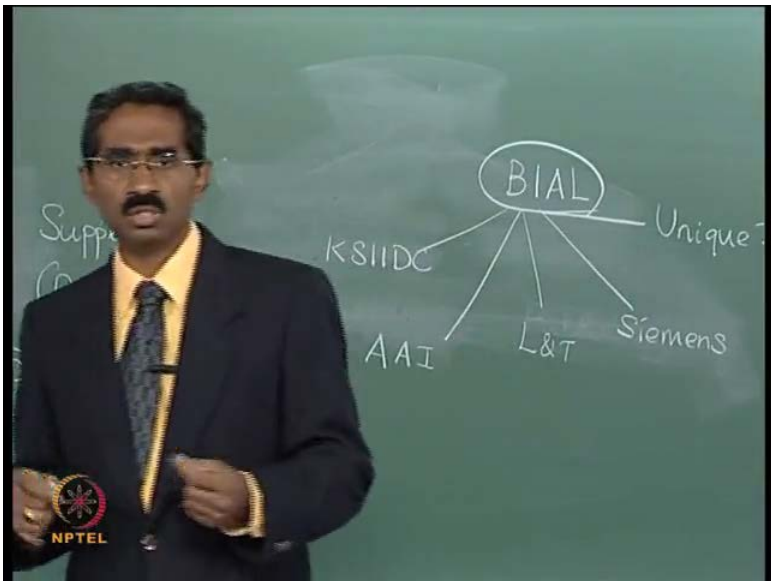

In the Bangalore International Airport, there is public sector participation in terms of airport authority of India and then KSIIDC, so this also becomes a PPP project. So, whenever we have Greenfield projects, where we actually have public sector investment in terms of capital as well, they also called as joint ventures in a concession, in most cases there is no public sector investment.

So, public sector gives concession, they actually give a license to the private sector to operate the facility for certain amount of time. But, there is normally no financial investments being made by the public sector, but in a Greenfield project and in a joint venture specifically, there is capital invested by the public sector as well. And then the fourth category of PPP is divestiture, a divestiture involves a sale of existing public sector entity, it can be either a 100 percent sale or it can be partial sale of shareholding, and both of these cases it is called as a PPP.

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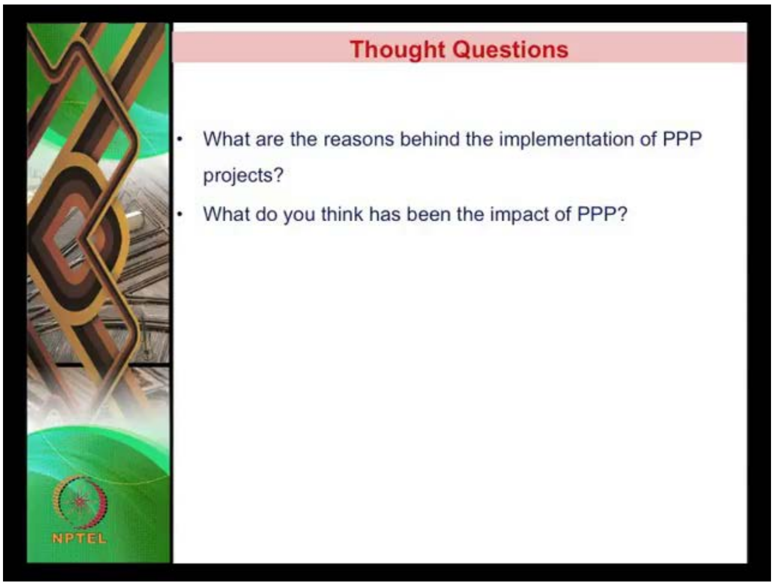

So, before we end today's lecture I have couple of thought questions, the first question is what are the reason behind the implementation of PPP projects. Quite we have seen lot of projects being implemented by PPP not a day passes without seeing some news about PPP are other in the news paper. So, why there is such a move, such a interest in terms of implementing.

And second what you are thing could have been the impact of PPP, so we have actually been implementing PPP projects for several years now in some of develop countries like UK the PPP has been implemented for the last two decades ((Refer Time: 49:12)) in a very active way. And in developing countries at least for the last 10 years, then has been substantial interest implement in PPP project. So, the question is what you thing would have been impact of PPP so far, so will spend some time discussing this question in the beginning of next lecture.