

**Urban Governance and Development Management (UGDM)**  
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**Lecture – 27**  
**Alternate Sources of Municipal Finance**

Welcome to lecture 27. In this lecture, we will discuss the alternate sources of the municipal finance. In the last lecture we started the discussion on the municipal finance, and we had a discussion on the overview of the municipal finance what are the classical and the traditional sources of the municipal finance. And we discussed 4 distinct aspects like management of the expenditure management of the assets.

And the resource mobilization and augmentation and also management of the investment and today we will discuss the alternate sources of the municipal finance.

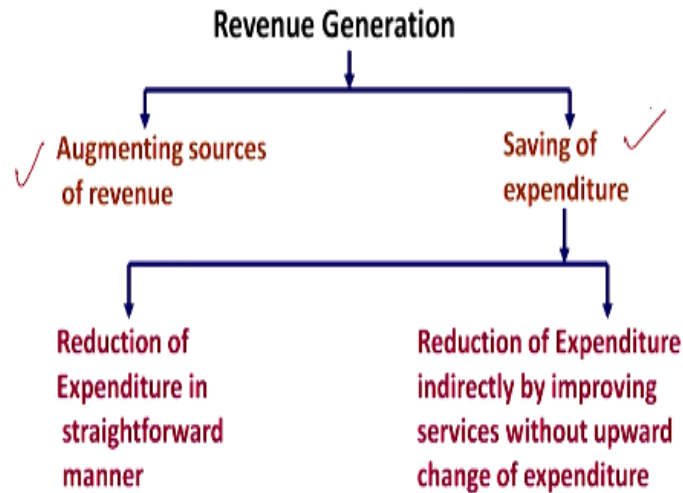
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## Contents

- ❖ Alternative sources of Municipal finance →
- ❖ Bonds ✓
- ❖ Borrowings ✓
- ❖ Example of financing public infrastructures

Because the traditional or the main finance may not be sufficient in times and out of that we will discuss in details the bonds and the borrowings and we will see 1 example of financing public infrastructure. What kind of issues did the public infrastructure they face? and what kind of strategies you can take? just as an example we will discuss.

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So, let us start so this we know that revenue generation it has augmentation and the saving is expenditure and there is no other shortcut only thing. That we can augment the sources of the revenue and we can save the expenditure by various matters we have discussed our last day.

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## Lessons Learned

- Emergence of municipal bonds and pooled financing as a viable option for infrastructure finance.
- Municipal bonds and pooled financing only for the financially stronger municipal bodies
- Dearth of bankable projects.
- GOI incentive funds are just now taking off.
- Continued requirement for state/central grants to make project financing plans commercially viable.

Now based on the last few decades work in the municipalities they are a few lessons learned. Let me discuss first that some lessons and the trends so emergence of municipal bonds and pooled financing as a viable options for the infrastructure finance has been seen in the last few decades. So, please see the municipal bond and the pool financing then municipal bonds and pool financing only for the financially stronger municipal bodies.

These also another observation we have seen that apart from the classical traditional finance sources only the larger municipalities and the corporation. They are able to mobilize and generate the pool finance sources then data bankable projects municipalities they are Corporation they do many projects but there are very few projects which is bankable. Bankable projects are that the projects which can be a credit worthy or bank can invest money.

For where they find that is some amount of recovery can be there and they can pay the bank with these emis and then government have any incentive funds are just now taking off for the pool financing to enable this smaller municipalities. So, that they can also get the advantage of the pool financing continued requirement of the state central grants to make projects financing plan commercially viable.

That means that traditionally the municipality they have been financing the major projects using the state and central government grants. So, that is basically the challenge is how you can make the projects commercially viable. Users willing to contribute project implementation guaranteed so basically for any project if you think about the recovery the user charge is a very important component on the recovery.

But the moment you talk about these are just people are basically initially unwilling. So, if you assured them that well the project implementation within time is guaranteed and they will get a better service. Definitely users will be willing to give at least some amount of the user charges it has been seen in last various decades so and local reforms some kind of local reforms through the municipality and the ward committee can also be done.

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## Why alternative sources of financing?

- Inadequacy of conventional sources.
- Bridging of resource gap.
- Improving the financial and project management capabilities.
- Inculcating financial discipline.
- Attaining objectives of accountability, transparency and efficiency.

Additional fund  
↓  
monitor/manage

Now why we need the based on this trained and the learning what kind of alternative sources financing are there and why we need alternative sources of financing. Because basically our conventional sources are inadequate it is not possible to fund each and every project of the city by conventional sources. Because 2 reason the conventional sources are limited number 1 and number 2 the collection efficiency is also limited.

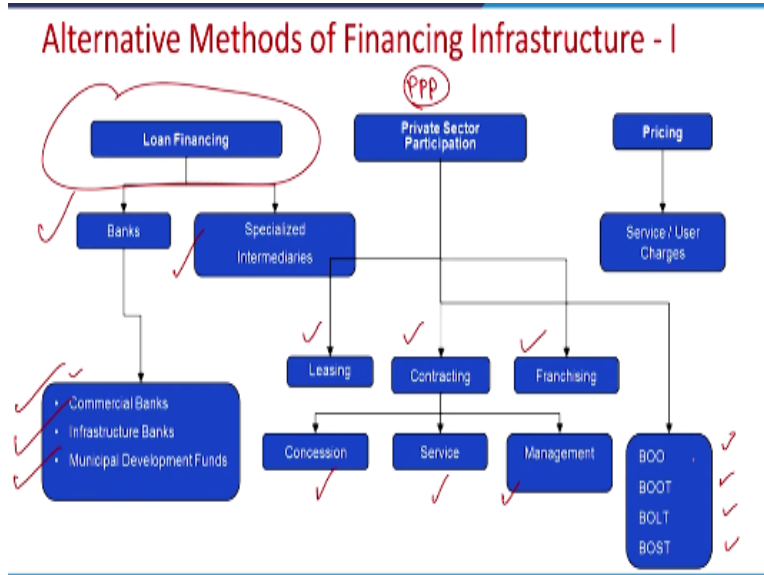
And over the overnight it cannot be increased randomly in a very high rated it takes time to enhance or to augment the revenue from the conventional sources therefore alternative sources very much important. Second is bridging the resource gap maybe for some project you need a 100 rupees. Some rupee resource you are getting from some government grant for example 80% or 70% how you can bridge the gap of 20- 30%.

So, that bridging the gap is important for that particular project improving the financial and the project management capabilities. Sometimes you need to have additional fund which is not included in the project financing to monitor and to monitor and manage the project. So, that also could be required additionally inculcating financial discipline. Now alternate sources of final financing can also give you some amount of financial discipline.

Along with the regular sources of funding attaining objectives of accountability transparency and efficiency. We had detailed discussions on the accountability and the transparency application of

the Rti in the e- governance and all those elements in the first section of this course. So, therefore you could I hope we could understand that those kinds of systems and the mandates can also improve the improvement of the accountability and transparency in the accounting and the financing mechanisms of the organization so let us see the alternative method of financing.

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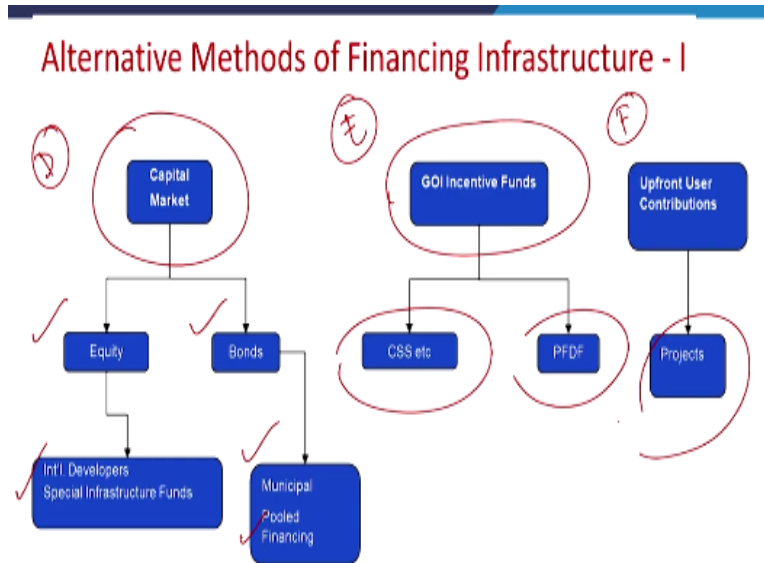
So, one could be the loan financing like from banks or specialized intermediaries there could be like small financing mechanism. The banks could be like a commercial bank there could be infrastructure banks there could be municipal development funds most of the commercial banks are nationalized. There are few infrastructure banks also they also provide money for the investment.

Apart from that there could be private sector participation like private public partnership and also complete private partner participation. It can be leasing contracting franchising concession service and management and there could be various method like BOO or build operate and own build operate and transfer bolt boost. We will have it dedicated lecture on the PPP mode in the end of this week.

So, I am not going to much details right now and apart from this loan financing and private financing there could be also financing like the service and user charge which basically is a

partially explored or explored or unexplored areas of the municipal finance apart from this there could be other financing.

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Mechanisms like capital market from the capital market you can use equity or bonds like municipal bond pool financing special infrastructure funds. There could be government of incentive funds time to time government of India and sometimes state government they have a use the incentive funds like centrally sponsored schemes and other schemes. So, these are also kind of another alternate source of municipal financing.

And there could be financing like upfront user contribution like even in the beginning of the project the users also can contribute for the project through the project. So, these are the alternative financing mechanism it may not be possible that each and every urban local bodies explore each and every alternate possibility. But definitely some of all these possibilities are applicable and it is possible to explore now let us see little details about the municipal bond.

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## AHMEDABAD MUNICIPAL BONDS

- The Ahmedabad Municipal Corporation (AMC) was the first ULB to access the Indian capital market
- First municipal credit rating in 1996
- First municipal bond without state government guarantee in 1998 (Rs. 100 crore)
- Annual interest of 14% and 7 year tenure
- Private placement: 75%

Basically Ahmadabad municipal corporation was the first urban local bodies to access the Indian capital market in terms of the bond. So, they first got the credit rating in 1996 they started the municipal bond and first municipal bond without state government guarantees 1998. So, they started rupees 100 crore capital from the market they could have that kind of from a huge funding from the market where the annual interest was 14% and 7-year tenure.

And private placement was 75% so Ahmadabad municipal bond was the first of its kind in the country and that showed the path that yes, it is possible to generate funding from the equity and the bond also.

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## MUNICIPAL BONDS

- Since 1997, several cities have issued municipal bonds without state government guarantees are Nashik (Rs. 100 crore), Nagpur (Rs. 50 crore), Ludhiana (Rs. 10 crore), and Madurai (Rs. 30 crore)
- The bond issued by the Municipal Corporation of Madurai was issued to refinance an existing project
- In most cases, bond proceeds were used to fund water and sewerage schemes

And after 1997 you can see that several cities have issued such municipal bond. For example, Nasik 100 crore Nagpur 50 crores Ludhiana Madurai and they are many. So, they try to issue means municipal bonds and that has been successful. The bond issued by the municipal corporation of the Madurai was issued for refinance of existing projects or those kinds of special projects also could be identified for raising the bond.

Because that could help in time to time and in case to case and in most of the cases bond proceeds were used to fund water and sewerage schemes. Now the public infrastructure like water supply road sewerage these are the major project which people basically give priority and the preferences and for getting money or getting a contribution from the people in a municipal bond.

If you can identify probably all these projects as an icon project or as a landmark projects, so that people become interested and they can see that yes if we can participate not only. We get some revenue also we get some better services in near future so that is the important part of the municipal bonds

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### TAX FREE MUNICIPAL BONDS

- To boost the municipal bond market, the Government of India decided to provide tax-free status to municipal bonds.
- Ahmedabad is first to issue a tax-free bond (Rs. 100 crore)
- Hyderabad (Rs. 82 crore), Vizag (Rs. 50 crore), and Nasik (Rs. 50 crore) issued tax-free bonds
- Eight MCs, and Utility boards issued Rs. 120 crore tax-free bonds
- Municipal bond annual interest rates are 1.5 to 2% less than other loans for same credit enhancement structures

Then there could be tax free municipal bonds like say Ahmadabad I told there could be they are Hyderabad 82 crores Vizag also 50 crores Nasik I told they are few municipal corporation utliyy



boards issued 120 crores. They are many examples where they try and mobilize the finance from through the municipal bond system then pool finance development scheme level.

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### Pooled Finance Development Scheme

- Only financially strong, large municipal corporations are in a position to directly access capital markets
- Most small and medium ULBs are not able to access capital markets simply on the strength of their balance sheets
- The cost of the transaction is a significant barrier
- KUIDFC accessed the capital market by pooling 8 municipalities around Bangalore
- Pooled Finance Development Scheme (PFDS) has been designed to facilitate access to capital market by smaller urban local bodies.

It is basically that how people the organization can pull the finance from various groups or individual or the agencies that can be utilized for the public financing. So, this is the only financially strong large municipal corporation are in a position to directly access the capital markets through pool finance. Most small and medium ULBS are not able to access this I have told small ULBS are not able to access this fund.

The cost of the transaction is significant barrier now a proper system needs to be there in the place to make this mechanism working. Therefore, small municipalities may not be able to do it so there is various organizations like KUIDFC accessed the capital market by pooling and municipalities around Bangalore. Then pooled finance development scheme has been designated to facilitate access to capital market by smaller urban local bodies.

So, these are some of the actions by the government of India and the other state government so that the local governments for the smaller cities and the mediums cities. They are also get some amount of facilitation to access this kind of financing.

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## Borrowing From Commercial Banks/FIs

- Urban Local Bodies have also started financing their urban infrastructure projects through commercial bank loans.
- The Vadodara Municipal Corporation obtained loans totaling Rs. 700 million from the commercial banks.
- The Thane Municipal Corporation obtained a loan of Rs. 500 million in October 2001 from ICICI.

Then borrowing from the commercial banks now urban local bodies have also started financing their urban infrastructure project through commercial bank any banks. For example, whether they are municipal corporation obtained a loan totaling 700 million from the commercial bank. The Thane Municipal Corporation obtained a loan about 500 million in 2001 but one issue in this means this commercial bank is that they will only finance the project.

If the municipality can show the project as a cost recovery project and bankable project and then only the bank will provide the funding for the investment in that project. So, those are very important so therefore the detailing and the designing of the project are important. In the coming weeks we will have a dedicated week on the discussion on the project formulation. That time definitely we will touch upon this issue.

How a project can be formulated in such a way so that the project becomes a bankable project shows the recovery it shows the timely completion so that it gets the additional resources from also from the commercial Bank. And at times it may not be the only source of the funding it can breach the gap or the viability gap of the project.

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Example:

**Resource Mobilisation and Management of**

**Urban Water Supply**

Now let us see 1 example of a resource mobilization of urban water supply scheme what are the major concern issues and what we can do for the similar kind of projects. Now the issues are they given the fund constant.

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### ISSUES FOR CONSIDERATION

- Given the fund constraint, what should be the service delivery norm? *frequency duration*
- Should cost be the only consideration for selecting ground source as the source of supply?
- What about a rational water tariff policy? *Cost - return*
- Should we go for 24 hours supply from contamination point of view.
- Should ground water recharging, rain water harvesting and water body preservation be mandatory for every ground water

What should be the service delivery norm numb like the frequency duration these are the norms in government of India. There was a problem like service level benchmarking right now in the Amrita mission. They are they have given the norms for each and every city so you can follow that. Now should cost be the only consideration for selecting the ground source as the source of supply.

So, apart from the cost what could be the other consideration? Like environmental consideration like returned consideration. So, those that needs to be considered what about irrational water dietary policy. So, therefore it is not the cost it is the cost and the return of the service that is also applicable here should we go for 24 hour supply from contamination point of view.

So, these are the technical matter they have to take a logical and the rational decision that 24 hour supply if possible or less amount of duration will be sufficient for your city should groundwater recharging rainwater harvesting all this need to be considered along with the normal water supply. So, in integration you can make a comprehensive plan of water supply from the ground source or the surface source.

You can integrate the groundwater recharging or rainwater harvesting all these along with your water supply so that the financier or the funding agency they can understand that yes, the municipality has considered all relevant considerations and they have taken into consideration and then only they have finalized this project.

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### **PREREQUISITE FOR PRIVATISATION**

- Projects sustaining on stand alone basis.
- Return on investments comparable to market expectations.
- Deployment of fund / debt commercially acceptable.
- Effective cost recovery measures Environment friendly projects.

Then if there is a requirement for the privatization of the project there are a few prerequisites for a water supply project. For example, projects sustaining on standalone basis. The project itself h a standalone basis should be self sustaining and self recovering project then only private people

will be interested to invest. Return on investment that is ROI comparable to the market expectation.

If a private sector understand that return on investment is less than any other competitive investment which is available in the market they will not be interested. Deployment of the fund debt commercially acceptable. So, if the deployment of the fund or the debate part if it is commercially acceptable. Then only they will be interested effective cost recovery measures like environmental friendly projects so if it is an environment friendly project.

And cost recovery component is there they will be interested, and these are the prerequisite for the water supply project and that you can take here during the project for formulation time. Then there are few management issues in the planning process of water supply project.

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### MANAGEMENT ISSUES IN THE PLANNING PROCESS

- To have a development perspective for different time horizons. development plan
- Stabilising existing system to sustain the service level. future
- Developing additional source and transmission arrangement.
- Better water resource management through safeguarding of water source.
- Analysis of existing distribution system and arranging for addition / alternation.
- Better quality surveillance.

For example, to have a development perspective for different time horizons region it will come from your development plan of the city and the area level plan then stabilizing existing system to sustain this service level. So, what is this service delivery of the existing system and how we can sustain the service level for the future? These are the management issues developing additional source and transmission arrangement.

So, what is the additional source if your current source is the ground water what are the additional source. If you have a surface source near about your municipality or distant area what is the transmission and what is the transportation mechanism or the arrangement and that has to consider. Then better water resource management through the safeguarding of the water resource.

For example as I told earlier that groundwater recharging rainwater harvesting that also can be included and integrated so that the actual demand of the water through this classical source like surface or the ground is become minimal. And so that you can show better recovery better return from the project analysis of existing distribution system and arranging for addition and alteration.

What is your existing distribution system like networks, pipeline and how and what is the condition and does this need any augmentation or the improvement or aggregation and what is the plan for the new areas which will be included for this augmentation of the pipelines and the network? That also needs to be considered better qualities surveillance so water supply such as service that is there are an amount of leakage and wastage is involved.

Therefore, you need better quality surveillance so that you can minimize the wastage and the leakage. And also you can ensure the maximum amount of recoveries.

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### MANAGEMENT ISSUES

- Operation and Maintenance. ✓
- Water pricing policy. ✓
- Unaccounted for water. ✓
- Ground water. ✓ *balance*
- Land and Technology. ✓
- Financial and Institutional Management.
- Resource Mobilisation. *800000 - gap*

Management issues like when aim water pricing policies unaccounted water that is the leakage and the wastage and the groundwater how you can keep it balanced land and technology for water supply you need a larger land and better technology for the green water supply treatment plant and financial and institutional management. Whether your current institutional set up or municipal setup is going to implement the project.

Or you are going to create a new set of new organization to manage the project. So, that decision yet to be taken and how you are going to mobilize the resource. What are the possible sources and if you find any gap how you are going to fulfill that gap? Those are the management issues of a water supply project. But some of these issues are also applicable for other infrastructure project as well.

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### RESOURCE MOBILISATION

- Water Supply as per standard norms require large capital investment.
- Cost of production is dependent on - (1) O&M Cost. (2) Capital Cost.
- Capital Cost is again dependent on - (1) Loan repayment; (2) Replacement of plant and machinery.
- In our country sizable part of City / Town population live in slums and belong to EWS category.
- Provision of potable water as public good is required to be continued with government - be it state or local.

And in resource mobilization as water supply as per the standard norms we require large capital investment crores definitely. Cost of production is dependent on when O&M cost and capital cost. Capital cost is again dependent on loan repayment and replacement of the plant and machinery. These are important in our country sizable part of the city town population live in slums and belong to the EWS category.

Therefore, the implication of the cess is that they cannot repay, or they cannot provide a new user charge so how you can make it variable kind of user charge in your city. That is the challenge for

you and provisional portable water as public good is required to be continued with government with state or our local. So water is such as service that every people in the municipality that is the first requirement from the demon from the municipality.

And if you can provide a better quality water in a better service quarter water then you can not only satisfy the people need. You can also use the cases of the public health problems epidemics etc. Therefore, designing of your water play project which is basically a viable projects and which shows that return and recoveries is possible and is basically challenging but yes, it is possible.

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**POSSIBLE WAYS**

- Adoption of a tariff policy to cover O & M charges *→ variable*
- Allowing 10 to 20% of the produced water to be sold to industries at industrial rates.
- Making provision of annual O & M cost of 5 years after commissioning in the project estimate at planning stage.
- Collecting advance registration charge as community contribution to capital cost.
- Tax free municipal bonds.
- Institutional finance.

So, there could be some possibilities in terms of the strategies so you can adopt a tariff policy to cover the O&M charges so as I told they could be a variable policy. You can exempt the poor people like it economically weaker sections and lower income group people allowing 10 to 20 % of the produced water to be sold to the industries at industrial rates. So, this rates should not be compromised and subsidize for this part of the water to be sold directly to the industry.

With industrial rate making provision of annual cost of 5 years after commissioning the project estimate at the planning stage. So, operation and maintenance costs for 5 five years should be kept at the time of the project formulation. So, that the initial period 5 years you do not have to bother about user charge and everything and you get some time bar for some time cushion so that



slowly and gradually you can start the project recovery through the user charge from the people collecting adverse registration charges as community contribution by capital cost.

This is a innovative method you can start advance registration for the people who registered in advance they will get some amount of incentives in terms of the user charge. So, those kinds of mechanism which is innovative as which can creative and the enthusiasm among the people also can also create some amount of resource mobilization.

Tax free municipal bonds we have discussed in details. We have shown institutional finance that means the bank loans and loan from other agencies. You can try so these are some possible OS and strategies which you can try. So in todays lecture was basically overview of the alternate sources out of the alternate sources. We have discussed basically the bonds and the sources from the institutional finance or the public finance and the commercial banks.

And out of that after that we have seen the how a typical infrastructure project like water supply can be implemented and what are the major criteria in designing that project. Especially the financing the project and have also shown some of the possible ways and strategies how the project can be made viable. Definitely this is very indicative I mean the, the lectures I could not show in this lecture a very specific example.

Definitely, incoming lectures and the reference materials I will try to give you some examples so that you can get the idea that how an infrastructure project can be designed in a complete viability. So, those kinds of things required I request all of you that you please visit your OS sites of the some of the municipalities which I mentioned today like Ahmadabad, Baroda, Nagpur and Madurai all these municipalities.

And see that how they have augmented their resources from various sources the traditional sources and the alternate sources. So, next lecture we will discuss about the municipal accounts. Because in the last few decades we have seen that there is a major reform in the municipal accounts and efficiency of the municipal accounts. Ensure a better financing position a better

asset management in the municipality therefore our lecture next lecture is municipal accounts.  
So, with this we conclude. Thank you very much for attending.