Urban Governance and Development Management (UGDM)
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Lecture - 46
Fundamentals of Project Planning

Welcome to lecture 46. In this lecture, will discuss the fundamentals of project planning. In last few lectures in last week, we have discussed various centrally sponsored schemes and through those schemes we have told you that you have to create projects under various schemes. For example, we discussed the AMRUT Mission, Smart Cities Mission, Pradhan Mantri Awas Yojana and the Swachh Bharat Mission, National Urban Livelihood Mission and HRIDAY.

There are many other schemes which will enable you for some amount of funding from the Government of India and also state government. Now the availability of the scheme using the funding from the schemes and getting those funding for utilization of some work is depending or basically how you create a project and how you design a project and how you can implement the project.

Therefore, it is very much essential to have an idea how to create those kind of projects, how to formulate project and how to implement project, how to manage a project. So today in this week, will basically discuss particularly various aspects of the project management and today will start the fundamentals of the project planning and management.

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So in this lecture, will discuss basically how to define a project, how a project is distinctly identifiable, how it is distinct than the other concept like service and what are the stages and the significance of the project and some basic idea of the project planning and management, that also will be discussed today. So how we define a project? Let us see some common description or the definition.

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So project is a planned set of interrelated task to be executed over a fixed period of time and within certain cost and other limitation. So please follow the definition. So here the keywords are basically planned, then interrelated task, then which need to be executed, it is not something which is fictitious, it is something real which we execute on ground and it has a time interval, fixed time duration beyond which we cannot extend it.

And it is a cost limit and also it has some constraints and limitation. Now how it is different with the other concept like service because in your urban local bodies or your organization sometimes you provide essential services together but services distinctly different from a project. Service is a regular and incremental or accrual activity which does not have a particular start and end.

But in project it has a particular start and end because I told you that it is a time duration. So therefore there will be a definitive end that is the target time and definitely there will be a start time which is not there in the service paradigm. The third is the in the service definitely there are constraints but the cost and other factor these are continuous in nature unlike the project. In a project, we determine the cost based on some particular influence or variables and we execute that.

But in service it is a continuous phenomenon for day-to-day task we perform. Now please recall our discussion from the organization development where we mentioned that a particular job is a combination of several task and that concept of job can be applicable for service and it can be applicable for a project as well. For example, in a municipality giving the municipal building plan sanction which is a particular service.

This is a whole job altogether but it has several tasks, some tasks are technical, some tasks are administrative, some tasks are financial. So those kind of combination of every task will make a complete job which is service and which is continuous in nature and it has a differential flow of demand. For example, out of 12 months there could be some months where the pressure of demand of those services could be more.

There could be some months or lean period where the pressure or the demand will be less but the project is not like that. Project is also a set of task interrelated task as we have told but it is a planned task and it has to be executed with some starting time and ending time during a time period and some cost feature is there, within that cost it has to be executed and most of the cases it is a very identifiable and separate setup task which is distinctly different from the regular and the day-to-day services.

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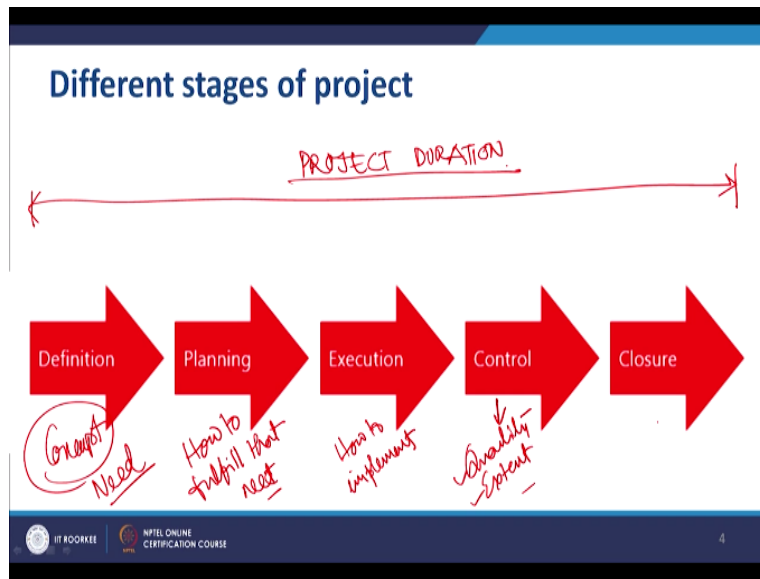
So with this concept, let us see the different stages of the project. A project has several stages like it has the definition and the concept stage. In this stage, basically we try to determine the concept of the project based on our need. Then, we plan that how to fulfill that need. This is a basic question we ask here and answer here. Then, execute that is how to implement. Then, some amount of control will be there.

Control out of that control basically it is quality, extent all this elements has to be seen and then there is a closer, so therefore starting from the conception to the closer that is the project duration. So these are very indicative project stages. In another perspective, it can be seen as a cyclic way. It may not be considered as a linear way. It can be seen as a cyclic way like this.
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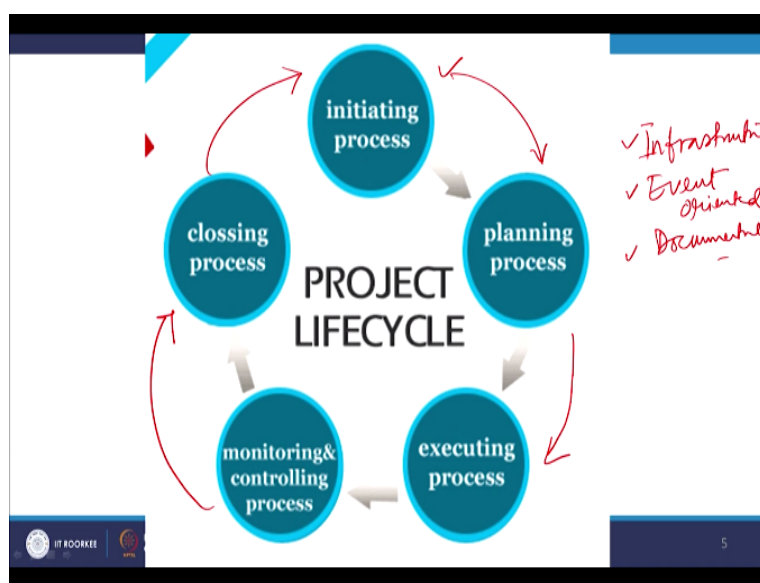
So there could be an initiation phase like stage 1, then the planning stage as we have told, then executing process, then monitoring and the controlling process, then closing process and after the closing we can again check that what kind of achievement or outcome we have achieved in the closing stage, whether it could fulfill the desired objective or not. So in this cycle, this is termed as a project lifecycle.

And this project lifecycle is very generic and very general for all types of project. It maybe infrastructure project, it can be infrastructure project, it can be some event oriented project, it can be some documentation project. So these are kind of concepts related to projects and the project lifecycle which you should not forget. Now let us see out of this project lifecycle some of the elements during every stages how those are there.

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So in the project planning basically these are the various elements. First is the project implementation guide book. We make a project implementation guidelines having all the rules and regulation for the procurement, approval, accounting procedures of this. Basically, this is required when a project is basically very large project or it is a programme. For example, we discussed last week various centrally sponsored programmes.

So for those kind of programmes, when we consider the whole programme as a large project, so this kind of tools will be required at the initial stage of planning. For example, the procurement, approvals, the procedure for the accounting, procedures for the approvals and the sanctions, etc. Then, the expected problems during the execution, you have to assess the expected problems like the land, resettlement, environmental clearance, etc.

So the assessment of the constraints and its coping, so that is also part of your project planning, expected delays during the execution. What are the elements which can delay your project? For example, land acquisition, poor performance of the contractor and the other elements which we can make the delay in the project. So identifying those elements before the project starts and so that you can take the adequate actions for that.

Then, the implementation of the integrated urban infrastructure project. Then, will start the urban infrastructure project, you start with a phasing and scheduling of the work, contract package, you contract the work to some other agency. Then, there could be some interconnected works. For example, if you try to implement some road work, the road work is interconnected with the other infrastructure like drainage, water supply, solid waste management, sewerage, etc and how you are utilizing your fund etc.

So these are the basic major points which you should keep in your mind in the project planning, even though will discuss in very detail manner how a project will be planned and formulated. So based on this, we basically formulate a project, so the planning is a very generic term about a project and formulate is basically a term which is little different than the planning.

So formulation means that you are making a project which is complete in its sense having all the required information and the dimensions so that you can implement the project with the desired objective.

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Next is what are the project management tools and methods? Some basic project management tools and methods are like work plan, how you plan for the work. We use bar chart, network diagram then we decompose or divide the activities into several tasks as I told earlier. Then, the sequencing of those tasks and scheduling as per the time. Sometimes it is done monthly basis or quarterly basis. If required, it can be done as weekly basis also.

Then, activity duration, I told it can be monthly, weekly or quarterly and critical activities and critical path. In your whole project management or the project execution, there could be some particular section or the task which can be very much critical or some connection between one task to another task could be some critical. So those kind of critical activities and critical path has to be identified in the project lifecycle.

Then, duration compression techniques, how we can reduce the duration and avoid delays, those also to be considered in the project management. Then, use of project management tools, there are various tools which we use. For example, these are the softwares like Microsoft Project or Primavera. These are the common softwares we use for project management including the infrastructure project management.

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Then, there are major actions which is required to be done for the project management. Cost budgeting for the fund requirement, then cost control, then project construction phase, under the project construction phase, basically we see the quality, then joint measurement for the bill payment, this is a task by the contractor and the concerned engineer of the municipality, quality control, testing, inspection, so this is a very important task to be done.

Progress monitoring and contract, contract management, suspension of project status. If required, you can blacklist the contractor. So quality is the basic keyword here. The periodic progress reporting and evaluation, then there could be various types of bidding, incomplete works, financial problems, litigations, termination, poor performance. Re-tendering, poor response, balance work, higher premium and then dispute resolution.

There should be provision in our project planning and the formulation that how you resolve the disputes between the contractor and the provider like urban local body. This is very general indication of the project implementation action but if you try to formulate a project under any centrally sponsored scheme or any external funding schemes, definitely you have to go through the detailed description of the project formulation and the DPR preparation of that particular scheme so that you can make customized project out of those schemes.

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Next, there are few major concerns you should also know that in the implementation one is the there could be variations of the time and cost. What are the variables you should know before you start the project? Approval procedure is important because it affects the time and cost. So in some cases, the approval procedures are clearly laid out. In some cases, the approval procedures may not be laid out.

So you have to get the right information before starting. Then, inter-agency coordination, most of the urban development or urban infrastructure projects or urban services projects need the coordination between various agencies. That we discussed in the beginning of some lecture that urban local bodies need to interact with the organizations at the state level, parastatal, at the district level, at the local level and also at the central level.

Therefore, the inter-agency coordination becomes very much crucial and in this coordination two things should be remembered, one is the government administrative procedures and protocols what you have to maintain and second is definitely your effective communication representation and also some amount of advocacy is required for the all kind of inter-agency coordination.

So in the later part of this course, we will have some dedicated sections on this element as well. So next is the progress report, yes time-to-time progress report is essential for the funding agency because they will be interested to see that whether the project has achieved the progress based on the funding or not. For example, you might have given the deadlines,

yearly deadlines or biyearly or quarterly deadlines whether you could achieve those deadlines or not.

Project management software could be used. Project completion report is required to close the project. Then, after this you cannot demand or you cannot ask any funding from that project and documentation of lessons learnt and best practices. This is usually not done in India but this is very important. Because whenever you do a project, during the project lifecycle you learn so many things, you face so many difficulties and barriers.

And if you document even in a small practice of your own initiation even if you do not have the centralized system that will give the fantastic learning for the next generation or the next project so that the wastage and the learning, wastage could be reduced and the learning could be utilized for the effectiveness of the next project. Next is the project benefit evaluation that is the impact assessment.

In the bigger project, we do the impact assessment of the project. So please give your attention and the priority for the impact assessment if possible. Some of the project for example the corridor projects or the public transportation project, green project where you are doing the canal front or the riverfront development, the basic water supply project you can make the impact assessment where the large citizens or the large population is impacted through those projects.

Then, management action plan, operation and maintenance. How you are making the action plan for the operation and maintenance. That means after the closer of the project, how you are continuing with the asset and the service if it is there. So in some of the lecture definitely will discuss the management of the asset and the financial part also. So this continuation of the project after it is completed and executed that part is very much essential.

In most of the cases, we keep some amount of funding in the project formulation for the operation and maintenance and then auditing, time-to-time auditing is there. One auditing could be central government; they regularly do the central auditing. Apart from that, we could have the state auditing or the localized auditing.

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So in the project completion report, these are the several elements you should not forget. So from the project starting to project completion, there will be several modification and the correction that has to be incorporated, technical approval procedures to be mentioned, what are the delays and the solutions taken care of, the bidding and the process for the tendering, scheduling of the tenders, then contract management, its delays, etc.

Utilization of the assets and the cost, comparison of the actual versus projected fund, project monitoring progress, best practices if it is there, the analysis of the tender premiums, time extension, etc and audit reports and then as built drawings, definitely every project will have a revised drawing, so as built drawing is basically revised drawing and then you keep the project completion report in an archive of the municipality or the corporation.

So that this project completion report can be referred during any query under the RTI Act or it can be used as a learning or as a reference of the future projects. So these are overview of the project planning. We have seen that a project is basically having several stages like project initiation, project planning, project approval, project implementation control and then the closer of the project.

We have seen that it can be seen as a linear function, it can be seen as a cyclic function and project is very much distinct in terms of its dimensions. It has a specific start and end and it has several tasks which is interrelated and which is distinctly different from a regular service. A service is a continuing and the accrual service, it may not need a specific funding for a given period of time.

But project needs a specific funding with a given period of time and project has some definite objective to create some additional infrastructure or additional new services that is why a project is very much distinct from a regular service. Then, after that we discussed some salient features of the planning, management and the implementation and the project closing. **(Refer Slide Time: 22:27)**
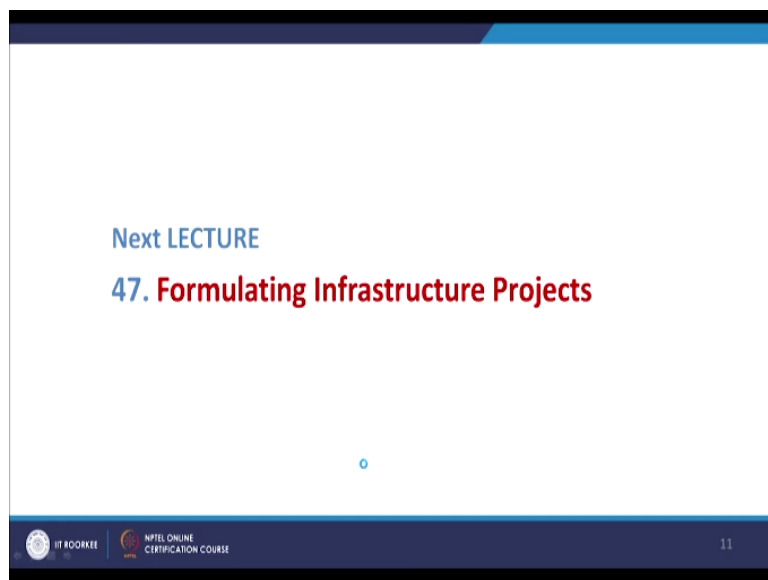
So next day will discuss about the formulating of the infrastructure project, how we can formulate, what are the basic elements of a project formulation in short and then DPR preparation. So with this, I close this lecture. So thank you very much for attending.