

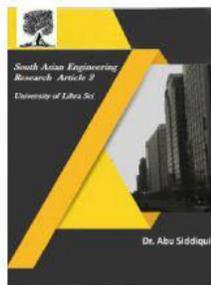


2581-4575

International Journal For Recent Developments in Science & Technology



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FINANCIAL PUBLIC SECTOR PROJECTS OF INDIA

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Abstract

The most important reasons for adopting project finance approach is to generate as much cash inflow as possible and also to foresee all the risks involved in implementing a successful business venture. The risk is a foremost element in any industry, and actually, it is one of the major elements that can considerably affect the total cost of the project. Time and cost overruns are one of such risk which directly impacts the expectation of the stakeholders. And, since time its control gained extreme importance in projects. Because of poor cost and management, huge losses occur resulting into time and cost overruns. Increase in the delay affects the performance of debt, equity and revenue generation. The need to address the increasing delay is pertinent for a country like India where factors which belong to outside environmental influences affects the most on project completion. Some of the reasons behind the delays in projects are slow decision making, poor management, increase in material and machine prices, poor contract management, poor design delay in providing design, undoing the work already done, land acquisition related problems are the most cumbersome, faulty analysis done for the project estimation and gap in tendering are the major causes of cost overrun. The paper includes the study of public sector projects and associated reasons of time and cost overruns in public sector projects.

Keywords: time, cost overruns, public sector, projects.

INTRODUCTION

Project financing can be defined as “the raising of funds on a limited recourse or nonrecourse basis to finance as to economically separable capital investment project in which the providers of the funds look primarily to the cash flow from the project as the source of funds to service their loans and provide the return of and a return on their equity investment in the project”. [1] Simply, project finance means to take care of all possible sources for raising funds, for a project by the possible means available or to make the means available for the other

who is providing finance for the projects. There are two means of achieving to this end, and this can be done by limited recourse or by nonrecourse means. An economically separable capital investment project is created to keep its obligations and liability to the project SPV and not to others. Financing of projects requires in-depth study of the planning of the idea, allocation of the resources, various risks to be mitigated and the possible channels available to generate immediate returns in no extra time to cover up the amounts to be paid to the financiers.

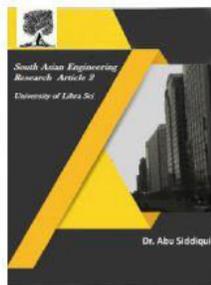


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Such projects are long-term projects. Hence time and cost is the utmost priority for the projects. "The government data shows that most of the projects which are on the scale near to 60 % are suffering from the time and cost overruns. If current trends continue over the Eleventh and Twelfth Plan periods (2008 to 2017), McKinsey estimates suggest that India could suffer a GDP loss of US\$ 200 billion (around 10 percent of its GDP) in the fiscal year 2017." [2]

COMPLETION ON TIME

The MOSPI [3] revealed some alarming statistics on the issue of time and cost overruns like weak infrastructure projects as roads, railways which as per the fiscal year 2010-2011 resulted in overruns as to cost and time amounting to Rs. 1.24 Crore. Amongst the 600 projects with an amount of 150 Crore near about 73 were started without approved completion dates. 2013 projects accumulated cost overruns and 306 for time and cost both overruns. As per the MOSPI stats of June 1999, there were 434 projects on the monitoring system with the estimated cost of 434 projects of Rs. 1,58,477 crore and the total expenditure arose up to August 1999 was Rs. 67,719 crore. From the total 434, 11 projects are forward of schedule, 86 projects are right on time, 204 projects are working on time overrun which is the 1 month to 132 months, 189 projects have cost overrun of about 33% (as per the latest approved costs), 131 projects have both time and cost overrun. The cost overrun in case of 204 delayed projects is of the order of 25%. [4]

TIME IS OF AN ESSENCE

Delay in completion of the project is the biggest nightmare of the Project Company. [5] The arrangement of numerous contractual relationships is all dependent on the very fact of the completion of the project. The day the project is completed, and the day it starts generating the estimated revenues it gives a sign of relief to the lenders, and other associated parties in a project. Time management hence plays a crucial role in the project finance. Everything in project finance is properly weighed and estimated that gives a picture to the lenders to believe in the project company for funding the finance. There are various situations in which time and cost get increased in a project. The present research paper will be discussing the time and cost overruns reasons, studying in the light of the various Indian cases of the Public sector projects and the private sector projects. The issue of interest here is to see as to why the projects of governments are not completed on time, and this may incur huge losses, and on the other side, the projects of the private companies are mitigated on the aspect of the time and cost overruns. Mr. E. Shreedharan in his speech stated that the most important factor for projects in India is 'punctuality', his experience in the Konkan railway project and of the Delhi Metro Rail Corporation was especially based on the theme of 'time is money'. He states that both of these projects were completed before time and on time just because, they respected the time of the others who were directly or indirectly associated with the projects. [6]

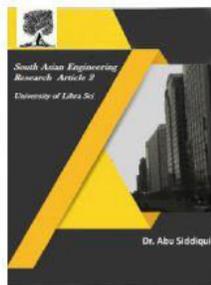


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CONNECTED CONCERNS WITH THE DELAY OF THE PROJECTS

Time and cost overruns may result in rising of the costs which will eventually raise the debts of a company all loan agreements are based on a finishing line above that duration the cost of the debt and interest will increase for a project company, and may also negatively affect the other connected project revenue sources which are sourced to cover the debt payment of the company. The other associated factors connected to the factor of time and cost overruns are damage payments payable because of breach of contracts by the parties because of the delay.[7] The mitigation of this problem is possible by scheduling the milestones on a target phase divided by the total time frame given. Checking the pace of the work on the timing interval, analysis and a report of the same can be made, and situation of concern must be addressed on an urgent basis. The most important risks of the parties to a construction contract are that the cost of the project will be more than the funds available from the loan taken or from other debt sources or the equity. [8] Various factors like for example may trigger the increased cost in a construction project if the cost of the projects is not properly estimated, inaccurate use of the engineering technology is deployed for the project, any economic changes or inaccurately determined investment fund requirement assess for the project to be finished. All these factors raise concern for time and cost overruns. The construction projects cost overruns risk is channelized by standby funding agreements, contractual undertakings both can provide

the flow of equity by a sponsor or other equity holders. A different recourse to this problem is to make an alternative escrow account fund or popularly known as a contingent account which may be used in cases of cost overruns.

REASONS FOR TIME AND COST OVERRUNS:

1. Inadequately devised project strategy One of the major reasons for time and cost overruns is inadequate project strategies. The prime area is the implementation problems which gives chances for uncalled situations like last-minute rush for funds. At the initial stages of the projects the timeline decided is given utmost priority but as the implementation stage begins it just vanishes. It is one of the reasons of time and cost overruns in the public sector projects which is not treated as the essence at all the phases of the projects, leaving a slight of the duration give rise to cost and extinguishing the time available.
2. More for execution and less for planning The work ethics and the efforts are at peak at the execution stage. Improper planning is the main reason for failures like not completing the projects on time and thus increasing the cost of the projects. The hasty decision making because of no chalked out strategy has to lead the delay in finishing the projects. Working as per the occurrences of the gaps is the forte of the Indian government. A foresight in planning is mostly missing in the checklist.
3. Bad managers for large projects Managers are the key personnel, are who handles the day to day affairs of the project company. The requirement of such a major role player

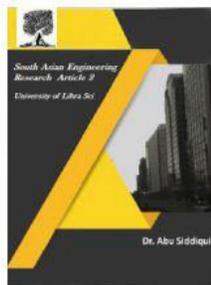


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in this that he must not only technically sound but to be managerially sound also. India in the public sector projects gives all it focuses on the technical experts, and they are the project managers who bring in good technical knowledge about the working of the project, but on the perspective of management, they result into failure. This led to bad management decisions with no farsightedness of financial and legal aspects related to the projects.

4. No effective policy framework The weak policy framework is also one of the reasons for increased time and cost overruns in a public sector project. Untimely regulations and specifications also cause time delays and cost issues.

5. Relatively long construction period Unforeseen developments during the time of construction phase may also an unjust time and cost overruns which makes the project less lucrative investment. The projects of large scale have long construction period which makes the project more sensitive towards the time and the cost which if not balanced out does fetch cost overruns. It is noticed that the risk of such delay is more in the specifics projects like of power and roads and lower in sectors such as telecommunications and urban services.[9]

6. Maintenance of the workforce Oiling the machines considered very important for machines likewise in the same manner any organization is required to take care of the workforce properly and timely given attention also helps to address the concerns of the project company. The engineers, labours and other workforce working on the

projects must be given a timely response to their needs to maintain their efficiency and effectiveness towards the project company. This efficient workforce will bring quality results, maintains the output with the accountability.

7. Project management The attitude of keeping the consciousness alive for the growth of projects is important to keep the knowledge up to mark. There must be continuous studies and thought to provoke an attitude of learning new management skills and knowledge. The general Indian attitude is to adopt the traditional approaches, and that is also one of the major causes of decision-making delays. New approaches to project management must be adopted for best of the results. The attitude must be to have such approaches which make the project to finish on time, within the budget available and for quality results.

8. Cover the time and cost risk Turnkey contract transfers much risk from the project company to the contractors, added up with penalties for delays and shortcoming in performance scales of the contractor's report to complete the plant on the pre-decided completion date. The reputation and experience of the engineers procured a team of management and the performance of the contractor is the most crucial part of the project company and also plays a significant role in identifying the risks.

STUDY OF PUBLIC SECTOR PROJECTS D.M.R.C.

The success story of DMRC is a landmark example for the completion on time. The Delhi Metro is a rapid transit system that makes connectivity of Delhi with its far

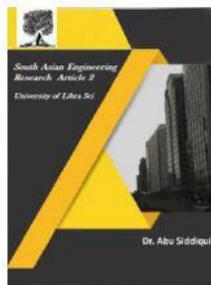


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towns. This project was built and is also operated by DMRC; it is a fully government controlled company. Where the central Government has 50 %, and the Delhi Government has 50%. So, the central government and the State government are at the partnership. The best feature of the study of DMRC projects is that the mandate provided for a time limit of 10 years for the first phase, which was changed by the project heads to 7 years without any delegation of target time on their own. This attitude of being before and ahead of time was the reason behind the success of the DMRC. The cost was estimated right as per the needs because of which there were no cost overruns. All the next phases were also completed on time and also without incurring any extra costs.

POINTS OF CONSIDERATION

- The project idea started in the year 1984
- DMRC was established in the year 1995, and E. Sreedharan was appointed as managing director of the company.
- The construction was started in the year 1998 and was to be completed in different phases
- The first section of phase I opened in the year 2002. Completed in the year 2006 on the same budget estimates of US\$ 2.3 billion and before the time that was three years ahead of the completion date.

SUCCESS MANTRAS

- Proper planning for every aspect of the project which involved the financing techniques.
- The right kind of workforce was taken, highly experienced and trained engineers in technical as well in the project management

area were appointed.

- The important decisions were totally in the hands of the management, they had the direct authority to go for people who are needed as per the requirements of the projects, and they gave tenders after much analysis, and
- A fully fledged study of the cost estimates is done to outline the needs of the project.
- There was proper alignment between the project plan and stakeholders' vision, which helped in the trust, created transparency and accountability to give results on time.

KONKAN RAILWAY PROJECT

The Konkan railway project was the missing connection between Maharashtra, Bombay, and Mangalore. The 741- kilometre line connects Maharashtra, Goa, and Karnataka. It faced many challenges because of the tough and difficult environment terrain, making tunnels in unfriendly adverse conditions did give a hard time to the project completion. Government fund of 1/3rd raised the finance, and the tax-free bonds raised the rest. For this project taking into the scenario of the kind of risks involved the contractor for the project was allotted to the best and quality oriented construction firms which were L&T, Gammon India, and AFCONS. Because of the dynamic nature of the terrain the fast construction steps were to be taken which included innovative practices adopted by the project company. The local technology was not sufficient enough for making the bridges in the river setting; therefore, the tunnelling machine of new technology was imported from Sweden. The geographical setup of a variety of areas was different which made a lot of hurdles in

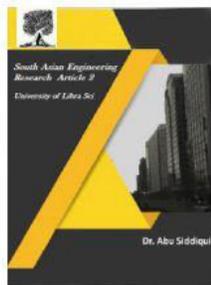


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the progress of the project. There were many accidents as well as loss of property and lives during its phase of construction. Hence, there were a lot of cost issues in this project which led KRCL to adopt technological factors to mitigate risks. The

KRCL refers to them as geo-safety issues which are on the goals to curb down by chances of risks of vulnerability because of the weather variability. The results of this railway line were best as the technology adopted was best where on the other zones are running the trains at 110 km/hr this railway track is running the trains at 160 km/hr which is the best speed potential available in India. [10]

SUCCESS MANTRAS

- Adoption of latest technological machines and methods to work on the toughest of location.
- Proper studies were undertaken to study the geographical climate of the areas under the concern.
- Estimation of cost was made keeping in the record the risk of mishaps and accidents.

RAILWAY GAUGE- CONVERSION PROJECTS [11]

The railway track conversion project of the Bankura - Damodar railway line in West Bengal has jolted up to more than 20 times from Rs.111.9 crore to Rs.2,371.85 crore since 1998, 1998 was first approved. The project was executed by South Eastern Railways, is presently to be commissioned in 2019, a delay of 14 years from its original timeline. The estimation of the cost was done in the year 2001 by the Southeastern railways the estimated cost was Rs. 2.54 lakh crore. The slow pace in completion of

infrastructure projects in the country and the cost overruns could well be gauged with the slaying of examples like of Gondia-Jabalpur railway gauge conversion, 1998, is on the urge of another scheduled completion time to be in 2019. The gauge-conversion project on the Gondia-Jabalpur stretch in Madhya Pradesh, undertaken by South East Central Railway, is facing a delay of 21 years. The Rs 590.63-crore project is now expected to be completed in 2019. The original cost was Rs 386 crore and the project completion year was 1998.

REASONS

Railway projects are stretched across long routes, and they involve a cumbersome and long battle over land acquisition issues. Often, it involves choosing between taking a shorter route and saving time and cost or opting for the longer route and increasing the construction time period and the costs.

OTHER PUBLIC SECTOR

UNDERTAKINGS

24 of the projects of ONGC are facing delays. Its G1 and GS-15 oilfields off Andhra coast are facing the 2nd-highest cost overrun of 820 % & delay time of more than nine years. In the power sector Power Grid, 43 projects of state-run are facing delays.[11] Some 30 projects are facing delays, mainly due to forest clearance, right of way and land acquisition issues. Gradually with the help of private sector players, the pace of infrastructure development in India has picked up, particularly in the last 24 months with over 1,260 central infra projects the original cost of these projects was estimated at Rs 15.84 lakh crore currently underway. However, the

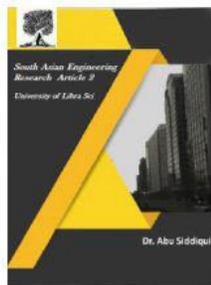


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bad news is this that there are major issues of time and cost overruns. Mostly above half of these projects are running behind schedule, giving way to expensive cost overrun.

SUGGESTIONS AND RECOMMENDATIONS

There are various risks involved in a project, and the bigger ones are out of the control of the Major players. However, certain measures and precautions can be taken beforehand to negate the chances of incurring delays and cost overruns. One such measure is to prepare the bid documents keeping in point the immediate and the most important weak points as well as the quality needs of the projects. The Selection of the bidder is the one of the crucial decision. The wrong contractor can delay the projects and also affect the deadline for the projects. After realizing that it is difficult for the

public sector projects to cope up with the completion and working of the projects. The Government of India adopted Public-Private Partnerships schemes from the past decade which has given mixed results. The PPP model, the results of such projects are amazingly better than the results of the traditional recourses which were adopted by the government. The PPP model is based on a basic motto that is to give best of the quality of good or service as a result. Some examples will describe the success stories like the Delhi– Noida bridge project, and the Bangalore International Airport. India is not on the way to make an aggressive approach towards the PPP model to get the desired results. Adoption of the means and ends for

better results giving the best of the decision making processes which is the best feature of the private sector. The private sector gives ‘project management’ more and more deliberation which is the need for the public sector in India. This enhances the basic engines available to the private sector projects they are:-

Major engines for growth of projects

- Properly educated workforce
- Technological innovation
- Cheaper and faster communication
- Collection of authentic information

Another recourse which is suitable to the Indian government is to adopt as many BOT models for completion of the projects. BOT Model is associated with the Public-Private Partnership in this Model is considered as the simple and conventional PPP model where the private partners are in charge to design, build, operate (during the contracted period) and relocate back the facility to the public sector. The role of the private sector partner is to fetch the finance for the project and take the responsibility to construct and maintain it. In return, the public sector will allow it to collect revenue from the users. The national highway projects contracted out by NHAI under PPP mode is a major example for the BOT model.[12] The Positives of the BOT Model [13] are as follows:

- The Government gets the benefit of the private sector to mobilize finances and to use the best management skills in the construction, operation, and maintenance of the project.
- The private participation also ensures efficiency and quality by

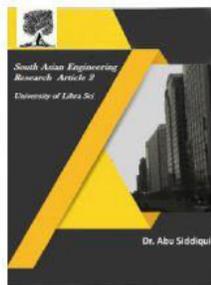


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using the best equipment.

□ The projects are conducted in a fully competitive bidding situation and are thus completed at the lowest possible cost.

CONCLUSION

Added by Mr. Kamala Nathan, “We have seen several e-governance initiatives take off but not efficiently managed. We need to adopt technology to bolster management practices, but that is not seen as a priority. People often perceive technology as a threat to government jobs. In order for e-governance to reach its potential, there needs to be a broader and more progressive way of thinking [14] CAG stated that cost overruns have caused only in railway sector cost overrun of Rs 1.07 lakh crore. In the latest reports identifies that the “target dates for completion of projects were either not fixed or not available on records of the Railway Administration. The physical progress was also slow where the target for completion of the project was fixed.”[15].The projects were not completed on time because of the no preparation is done on time even to proper estimations were done for the sanctions and hence more was added by the time consumed in acquiring land from the people. The major setbacks which can be pointed out are these that there are funds are not properly utilized; priorities are not set on the scale of necessity which led to the delayed progress of such projects. The connection of communication is lost in the phases where the central and state the governments are working together on the same projects. Instances show that in

respect of cost to be shared by the state governments. Most of the cases the state government has refused to bear the extra cost incurred in the project which raises a lot of finance-related issues and also causes delays A major setback for any project is acquiring the land for the projects. Any acquisitions which phase legal battle for any project easy, timely way out is not possible. Indian legal system is time consuming and runs for years. So if a fair method of acquisition is not adopted the chances of facing a long battle in the court is very high. Hence, fair methods must be adopted in dealing with the owners of the land to avoid legal battles. Other reasons for major setbacks are political, and the state and central government related issues which cause most of the delay. Thus, the Indian public sector work culture must follow the work culture of the DMRC which did establish itself as a landmark example for Projects to be completed on time. Training, as well as supervision, plays an important factor in the progress of the projects. The project's completion time for the project manager must be calculated well before the finishing deadline on the paper and to avoid the last moment crises. The political and the government intervention must be lessened as to the working in the project if the project has followed the criteria's. The due diligence plays a significant role and must be done without any biased. In the end, the motto for all the public sector projects must be to serve the public at large, must respect the time of the public and also of the people involved in the working of the projects.

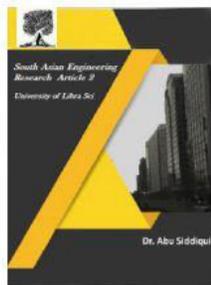


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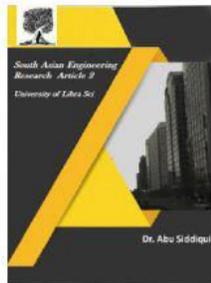


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