

# Analysis of Cost Overrun in mass housing Project

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**Abstract** – A construction project is fully depend upon estimation and budget. Cost overrun not only disturb the project cycle also it can fail or stop the project. Every project is depends upon the total cost of project. It is major issue in construction project. A study has been conducted for minimizing extra cost for various activities. Cost overrun is more dangerous to firm at mega project causing loss to firm. Cost overrun caused by many factors in construction industry. Various cost control technique adopted by firms to control the cost overrun in the project. Cost overrun can be controlled or prevented by taking early stages precautions and techniques. The main aim of this study to analysis the basic causes in cost overrun of the project.

**Key Words:** Cost overrun, Estimation, Budget, Cost Control, Construction Project.

## 1. INTRODUCTION

Cost of construction is an important factor in the construction industry. The Indian Construction industry plays a vital role in our economy and contributes a sufficient employments. The construction industry plays main role in India infrastructure growth also provide standard level of economic growth in GDP. Cost overrun is important factor in cost management of construction industry. Due to this, many projects of construction industry experiences the problems of cost overrun and causes more financial loss to the owner or the client of the company. So this research is a survey which is used to minimize the cost overrun in residential housing project, so that the owner or client should get a healthy profit in project. Office desk study should collect from owners, clients, contractors and company for various situation faces from them in construction process. Construction of houses, dwelling units and residential projects are most important parts of Indian Construction industry and housing sector is given utmost priority in nation development and economy. The Government of India has set a goal in housing that "Affordable houses for all families by 2022". So Government is providing many subsidy schemes to support the rapid growth in the housing sector. Example: Pradhan Mantra Awas Yojana etc. This schemes are helpful for lower annual income people to build their own houses. Also, these schemes helps to give discounts in private project for middle class peoples. The cost control during construction phase is the must for quality and precise development. Cost overrun can cause many problems during project progress in construction phase, which causes the loss

of profit or budget of contractors leading to various losses to financial status of client or company of project. Construction cost is one of the main factor for the success of project throughout its project completion phase. Also it has been given most attention through various project phase. Most of housing project are stop due to cost overrun or other financial problems. This various problems leads to bankruptcy of client or owner of company. The construction sector plays vital role in employment comes after agriculture sector in country economy. The construction sector is second largest sector in India provide almost 30-40 million employment to the people. To minimize such problems various methods should be adopted in the construction industry.

Materials Management, construction management, project management, estimation and quality management plays a vital role in construction industry for minimize the excessive cost and budget of project. Engineers and management are to be very cautious for prevention of excessive cost in construction. Also, some standards norms should be adopted for completion of project within quality, time and its budget.

## 2. LITERATURE REVIEW

Cost Overrun is major affecting problem in construction project to companies. Most of factors discussed by authors in various problems during and after the project. Many schemes from government are given for affordable housing to everyone. Lack of miscommunication between various parties also cause cost overrun.

Cost overrun and cost management during construction phase is important component in construction industry. Various authors have different contribution and opinion in this field. The main purpose of this chapter is to highlight their work of cost management and give some useful knowledge which will useful in this report.

Manoj P K(. 2017) Author suggested that, the construction sector given housing sector as important priority. It deals with various government schemes of government regarding this sector. He also discuss about various analysis and methods for controlling the cost of project. He study this project in Kerala and deals with practical problems. He also study EVA process (Earned Value Analysis) and various schedule process.

He also suggested, alternative and eco-friendly technologies in construction industry. He discuss about various

construction material and activities. Effective techniques should be adopted. The government should give the priority to the housing sector of affordable prize.

Sindhu Vaardini (2016) Author describes that, cost overrun is major problem in construction industry. It also deals various causes and problems affecting the life cycle of project, budget, profit etc. The financial burden to the owner or client is major risk at this phase. The paper also describes about various activities and management for cost management. It also describes about various methods like frequency index, severity index etc. The standard norms are studied and problems are discussed in paper.

It also suggested, the cause and future remediation for cost overrun. It also suggested that small activities should give priority and deal with it. The cost control management should be studied.

A.S. Ali, S.N. Kamaruzzaman (2010) A paper is about another developing country Malaysia. Various fundamentals are discussed in this paper about management in construction industry. The site location can create many problems in construction phases. Cost performance is a critical issue in this country construction sector. Most of projects are affected by cost overrun in this country. Poor cost estimation and under estimating the construction cost are main reasons for failure of project.

The data collection from the desk at different sites is carried out. Effective management should be used for prevention of cost overruns. The stock, supply and cost of material at different times play an important role.

Dr. Abdulaziz, A. Bubshait and Yaser A Al-Juwairah (2007) author study this project at Saudi Arabia. The competition between bids of contractors results in low margin of profit. The environmental and weather factors are affecting the construction and building social and cultural impacts are also main causes of failure. Incorrect planning and management – labour relationship can cause a failure or delay in project. Coordination between designers and contractor should be needed.

Strong financial planning can lead a better project. Design changes from client can incur additional cost to the project. Estimation should be done time to time in different phases of construction. The engineers and designers work more precisely.

Hemanta Doloi Author describes poor cost management is widely used term in construction management field client, contractors and owners play a vital role in overall project activities. Communication between client and contractor plays a vital role.

Planning management, contractor efficiency, design efficiency and site management play a vital role in control of time and cost overrun in lifecycle of construction project.

### 3. CONCLUSIONS

Different researchers from globe state different causes in cost overrun. Some common issues are discussed as follows:

#### 1. COST OVERRUN DUE TO FLUCTUATING LAND PRICES.

Land prices play a vital role in major cost saving project. If the land is purchased before the hike in prices more profit is gained. Type of land plays an important role in construction project whether it is sustainable for project or not.

Right selection of land at right time can provide cost optimization in project. Vision and proper management play a vital role in this stage. Management should take care of cost savings as much as possible in this area. Also they can discuss that the project is suitable for land.

#### 2. COST OVERRUN DUE TO MATERIAL MANAGEMENT.

Material and inventory management play a vital role in cost overrun of the construction project. Material prices like sand, cement vary through time to time. When the prices of materials are in budget store them in adequate quantity. Excessive storage of some item can be waste due to time factor. Inventory management of firm has proper and neat storage spaces. Also they can use extra space for extra materials in various conditions. Materials can save cost of the project to avoid cost overrun.

#### 3. COST OVERRUN DUE TO IMPROPER MANAGEMENT.

Nowadays, competition of contractors in bidding can have less margin. In this case, there is high risk of loss or cost overrun in project due to improper estimation and management. The miscommunication between owner, client and contractor can also cause cost overrun in construction project. Also it can cause delay in project which also causes cost overrun.

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