



## NECESSITY OF BUDGETING FOR MULTI STORIED BUILDING CONSTRUCTION

**S Radhakrishnan\*, Dr K G Selvan**

\* PhD Research Scholar, PRIST University, Thanjavur 613 403, Tamil Nadu, India

Professor, PRIST School of Business, PRIST University, Thanjavur 613 403, Tamil Nadu, India

**DOI: 10.5281/zenodo.2536873**

**KEYWORDS:** Acquisition Costs, Materials Management, Supply Chain Management, Cost of Capital, Work Contract.

### ABSTRACT

India is racing ahead in economic development. The traditional identity of agrarian economy is phasing out and we are enjoying a commendable status in World Trade Organisation. We are being looked up as the representative of Developing Nations.

The Government is according top priority for rapid industrialisation. Multi-National Companies are given preferential treatment for setting up their manufacturing facilities in India. Joint Ventures are also appreciably encouraged.

All these result in increasing employment opportunities, particularly in urban areas. This necessitates vast movement of people from rural areas to cities. The rental cost in city is prohibitive.

The land cost is shooting up and individuals, particularly coming under salaried class, find it impossible to construct independent house. Their economic affordability permits them buy only apartments. The availability of long terms institutional finance is strengthening their decision and accelerating the process of purchase of apartments.

The construction industry is enjoying overwhelming buoyancy and construction of apartments in multi storied buildings is taking place in full swing in city and outskirts of same.

### INTRODUCTION

#### METHODOLOGY

Personal visit to sites, observation method and discussions with site personnel.

Contours	Details
No. of sites visited	2
No. of floors	3 & 5
Covered Car Park, Lifts, Continuous Power Supply	In Both
Statutory Compliance	In Both
Gym, Swimming Pool, CCTV, Super Market	Only in the Second
Migrated Labour	Considerable presence in the second
Female Labour	In the First
Use of Construction Equipments	In the Second, remarkably

**WHAT IS BUDGETING?**

Budgeting is the process of predicting what would be the outcome in the process of usage of inputs in a prescribed manner, over a period of time.

In finance vernacular, it can be termed as outflow and inflow, expenditure and income etc., whereas in Construction, budgeting can be termed as quantification and appropriation of money and resources for a given result needed.

The conventional practice of compressing the financial aspects alone to budgeting is done away with and the modern version of budgeting is the formula needed or prescribed to achieve a given output. In other words, to accomplish the needed results what should be pumped in, in to construction activities not just merely capital alone but all other things required in a composite manner.

The Budgeting in Construction has taken a wider spectrum now. It is a matter of marvellous practice with established builders who are in the field for decades that budgeting is practised and perfectly achieved as well, from floor to floor till completion of the whole project.

While it is no doubt that capital is the life blood for construction, there are also other important factors which bear no less importance in determining the success of the project. A Prudent builder is a Master who exercises great care and caution in his activities throughout the project.

It starts from acquisition of land to completion of the project.

**First Step should be the Best Step**

It may sound an adage. This is actually the fundamental thing in construction business. Acquisition of land is the first and foremost activity in the construction projects. Land cost is shooting up day by day. Even the remotest areas witness this phenomenon.

The value of a piece of land is determined not only by its own value, but by other important features as well. Proximity to important areas is a plus point and boosts the value of land. If it is in the heart of the city, it is a booty.

Till half a century ago, the lands near the seashore did not attract any builders or real estate stalwarts. They were only considered to be mere barren lands. Now, there is a sea change in the perception of people. An independent house or even an apartment in a multi storied building near seashore is considered to be a matter of pride, for numerous reasons. From the point of health to pomp of luxury, it is the address.

Land is, no doubt, scarce. It gets scarcer with more of houses and apartments pressed in. The value gets multiplied several times with the overall developments encompassing the area. Always, pay a great deal of attention on the selection of area for construction.

Predominantly, the land cost determines the price per square foot of the apartment. Buying a piece of land at the height of its price is just imprudent. A wise builder would never venture this because his budgeting would only reflect a negative revenue to his work.

Buy the land, allow it as it is for some time. Let the value get shot up with the passage of time. Start the construction activity then. The project will become a land mark. This, by itself, promotes the overall development of the region and also enhances the value of land in the neighbouring areas as well.

This is the practice of established builders. The lands would be bought by them at throwaway prices with a conscious understanding that construction to take place only later on.



## Global Journal of Engineering Science and Research Management

The owner of the second site made a private remark that he bought the land at an unbelievable price, years ago. He fixed the price on par with other builders and many of them had bought identical measurement of lands at a terrible price now. He openly confided that he gets incredible profits in the construction, due, mainly to land cost. Hence, the basic thing is that never buy the land at its height of price, whatever be the locational advantage. Despite the luxurious construction and premium features, chances would be looming large for only a loss or a very meagre profits alone which would never match the efforts and time put in, in the construction.

There are many eminent builders with excellent product features in their construction but are only struggling to sell them off. They spend whooping sum on advertisements too. It only further burdens their budget. They are just caught in utter financial straits. This is the stark reality of the other side.

The one and only reason is land cost.

Always evaluate the construction cost in relation to land cost. A prohibitive land cost will just eat away all the economies of scale of operating mechanism. The host of benefits and advantages due to supply chain management, finance management and the marvels of labour contract will all get just perished in the land cost ultimately leading to no tangible gain to the builder.

Many builders in the city are facing this grim now.

Hence, budgeting should be fair and realistic. Budgeting is the projection of the expenses for the results anticipated by the builder. Important attention is to be bestowed upon this.

In this regard, it is worthwhile noting that “if the cost of the project is not estimated accurately, the fund plan will consequently be inaccurate. The unit in such a case will face acute shortage of funds and this may lead to the suspension of the project or at least considerable delay”.

[ 1 ]

### **COST OF FINANCING**

This assumes equal importance as that of land cost.

The fact of the present is that builders are finding it increasingly difficult to get institutional finance. More number of builders are in the field now. Number of projects are going slow and some of them have got the bolt of halt essentially due to funding problems.

The securities offered by the builders are no longer a matter of safety to the institutions. Their fund sanctioning procedures are tightened and more stringent policies are put into force.

For some of the builders, the reputation they enjoy and the goodwill they have in the clientele are the saving grace with some institutions.

It is not necessary that the project should be large with more number of floors. In fact, larger the size of the project, more is the imminence of risks.

Capital is only determining the success of the project.

It is a common sight in the city that many of the small builders have abandoned the project, with more than half way through, due to fund issues. When the “ready to occupy” apartments themselves face the waiting period of considerable length of time for disposal, unfinished/abandoned projects cause only eye sore to general public, tarnishing the image of the builder. They face the threat of rejection elsewhere also.

Normally, the builders manage with their own money. For established builders, rotation is relatively easy as they undertake multi projects at different places. This also is not guaranteed at all times.

The basic point before embarking on construction is to be fully assured of uninterrupted flow of funds during the process of construction.



## Global Journal of Engineering Science and Research Management

Prudently selecting the location of the project and also limiting the cost of the land to the budget will help a lot in controlling the financial issues to an extent.

Any lapse in financial management will throw things out of gear. The relationship with suppliers and contractors will get strained. Labour will become a matter of conflict. Such a situation will attract the attention of authorities which will further weaken the status.

Financial constrictions will throw things in utter jeopardy. Everything will converge in to a calamitous situation. At any cost, this is to be totally avoided.

Private Finance is the easy option for many of the builders. While this is available just at a call, the interest charges are at exorbitant rates. The interest is calculated on a Daily Basis. A delay of two weeks will impose a huge penalty on the builder. Nevertheless, they resort to this due to the fact that it is available at any time. For builders of repute, money lenders do not even ask for any guarantee except their verbal commitment.

This private capital market is such that money availability is not a problem at all but repayment will only become a problem, even after a lapse of few days. Knowing this predicament fully well, builders choose this option, braving the risk for the simple reason that any amount of money is got at any point of time.

Hence, right at the start of the project itself, arrangements for continuous supply of finance throughout the project execution is to be ensured. Necessary advance action must be taken at the inception stage of the project itself. If this is done, definitely the risk factors would be at the most minimum.

Budgeting is not a mere statement of figures in columns but should be a true reflection of reality.

Of course, braving all these risks is only to accelerate the construction process and complete the same within the time scale committed on paper. Construction is a combination of three essential 'M's – Money, Men and Materials. In this regard, it is pertinent to note that "technically speaking, the actual process of investing occurs during project execution. Hence, the cash invested in a project is used to purchase materials and resources for the purpose of converting the supplied cash into assets".

[ 2 ]

### **BUDGET ON MATERIAL MANAGEMENT**

The Builder, by virtue of his experience, should clearly chalk out the material requirements in terms of:

- Necessity of items by usage
- Value of items
- Lead time for supplies

The above three are the essential criteria for categorising his budget. In today's scenario, there are numerous suppliers in the market ensuring quality products to builders. The demand for materials is also on the rise.

The suppliers' business terms are liberal but strict on payment. Any delay in payment to suppliers or default will only strain the business relationship and stopping further supplies.

An avoidable delay of even two days will prove costly to builders. Labour has to be paid their wages irrespective of the fact whether they are given work for the day or kept idle due to supply issues.

A wise builder will always ensure a protected budget to suppliers. This does not mean simply materials supplies. All the builders have only very limited number of personnel in their permanent payroll. Labour is also being outsourced like materials. As in the case of material suppliers, it is equally necessary that labour contractor should also be honoured with prompt payment. What is the fun in having heap of materials at the site without labour to make use of them?

The builder should accord priority in working out a realistic budget for payments to suppliers and contractors.



## Global Journal of Engineering Science and Research Management

Cost of capital and interest burden are the issues to be clearly borne by the builder only. This should have no bearing on commitment to suppliers. If so, it will only drive things from bad to worse.

It is to be further noted that pile of materials would be waiting for receipt of critical items to be pressed into use, whose supply would be delayed due to strained payment issues.

Analytically, this is an example of opportunity costs.

It is very relevant to note that “the major portion of inventory carrying costs is of an opportunity cost nature and therefore goes unidentified in normal accounting reports”.

[ 3 ]

### SUPPLY CHAIN MANAGEMENT

It is the practice of large builders to have more than one supplier in their list. However dependable the supplier is, it is not advisable to bank upon a single source. The contract of supplies gives a cushion of Force Majeure clause to them.

If the supply could not be honoured due to circumstances coming under force majeure conditions, the supplier cannot be sued in any court as the delay is just beyond his hands. He has the legal shield protecting him. The builder only has to put up with such delays and the losses arising out of same. This only erodes the legitimate profits of the builder.

The senior official of the second site made an off the record mention that they were having only one reputed supplier for years. However, they came across a situation of abrupt stop of supplies for weeks. The supplier could not be taken for any compensation for the losses they suffered. The reasons attributed for delays were coming under force majeure clause.

While, of course, it was a case of genuine delay, the sufferer actually was only the Builder. They could not take any swift action in getting alternative supplier to cope with the situation. They had to virtually halt the work for a few days and to consciously do staggering activities for further more days.

This had heavily led to severe loss to the builder. After this incident, they started having two suppliers of repute in their order allocation. The situation is comfortable now.

The payment clause of suppliers differs according to supply terms. While they allow a payment term of 15 days under normal course, they insist on payment of within 5 to 7 days for the supplies effected under JIT (Just In Time) clause.

It is the responsibility of the builder to have budget for normal supplies and JIT supplies for honouring his payment commitment.

The budget provision for payments must have two blocks – one is normal payments and the other one is express payments.

Supply Chain Management (SCM) is a sensitive issue where it is a matter of honour while releasing payments and a matter of pride in getting supplies exactly as per time schedule. It is a prestige issue for both the builder as also the supplier.

### BUDGET FOR EXIGENCIES

This is where even eminent builders slip. Probably, the allocation would be on paper but not on vault. Accidents of different nature are the common features in construction sites. It was observed that in the second site all the operating personnel were wearing helmet whereas it was just absent in the first site.

All the safety features were in perfect order at the second site. The precautionary measures were in the prescribed manner. This was either dismally poor or virtually nil at the first site.



## Global Journal of Engineering Science and Research Management

It is absolutely necessary to earmark and physically maintain as well the liquidity for the exigencies. It is like a First Aid Kit filled with medicines. Major accidents demand tonnes of money. The delay in availability will only nettle the issue further.

Floor accident with trucks

Ladder accident with loads

Fire and Electrical accidents in any form

Whatever be the nature, severity is the feature.

A careless handling of such a situation would cost the fortune to the builder. Apart from monetary issues, he would get embroiled in legal cases as well. Unless the settlements are made then and there, it only means that he is dragging on the devil with him.

Past projects are always the torch for this. Preventive measures can be applied from the previous incidents. The costly lessons learned should ensure non recurrence or occurrence of such accidents.

It is normally the practice with the established builders to make a provision of not less than 10% of the total project cost as “reserve for exigencies”. In many of their projects, this is only maintained as a cautious reserve and the project got through completion safely. The credit goes to the whole team for the successful completion without any complication.

The reserve maintained is carried over as a treasure for the next project. They, as a matter of fact, maintain this practice right at the inception stage itself. Their budget provision includes this.

A Senior Official of the second site said that they did come across some incidents in their earlier projects where the necessity for spending from “exigency budget” occurred. It is a foregone conclusion in construction industry that however carefully the activities are planned, accidents are a common feature. This is more pronounced in the case of multi storied buildings.

At times, it would cost them heavily. The procedures of getting claims settled with insurance companies and other agencies are long drawn process and heavy amount of monies should be expended. There were also cases, they said, where they over spent for the money they got settled.

Under such circumstances, this exigency budget would only come handy without throwing any impact on the regular construction activities.

Normally, the small builders ignore this aspect totally. Their style of functioning is “do the work as and when money floats in”. This is the reason that many small builders suffered a lot with many projects left halfway through, succumbing to losses.

It is totally unwise to take calculated risks on exigencies. As long as the necessity does not arise, it is ok. When it took place, if not planned, it would hammer a bolt and clamp the project a halt.

The budget provisioning of big builders accommodates exigencies and hence they are safe too and bother free in their construction. Goes without saying that they are also totally compliant with all safety procedures at the site. The necessity of this is more for the small builders who fall a prey to such a thing by their sheer ignorance or imprudence.

The things seeming to be frivolous, will actually become calamitous depending on the severity of the same. Exigencies come under such category. Hence, this also assumes paramount importance in budgeting.

### **RATE CONTRACT**

It is a fact that all the big contractors have Rate Contract with Suppliers. Whether Material Suppliers and Labour Suppliers, all their dealings are well covered and guaranteed under Rate Contracts.



Rate Contracts are beneficial to both the Builder and also the Contractors.

The Suppliers are assured of business for the prescribed period of the rate contract. Prices are fixed and off takes are assured. This gives them the freedom of operation to plan their activities accordingly.

The same is the case with Labour Contractors as well. They are in a better position to plan their allotment and movement of labour to various other sites. They are also able to have better control on labour as well.

It is quite essential that the terms and conditions should be carefully framed and added into the contract so that nothing will become an issue to either side. The onus rests, more with the Builder.

In this regard, it is worthwhile noting that “A good contract defines responsibilities clearly is easy to understand and is reasonable and balanced in the eyes of both parties. Getting the contract right is crucial. At the heart of the contract are a description of what the supplier is agreeing to do and the nature of the payment it will receive for that work”.

[ 4 ]

## CONCLUSION

Small builders are yet to be fully aware of the complexities of construction. They do things as long as they could and abandon the project in the face any untoward incidents, till they fully recover from the same. Since they are managing the business with their own capital, this attitude is set in their mind.

Considering the competition in this business, they have to change their mind set and be realistic and progressive so as to be in the field. If the construction is stopped midway, the project will become an eyesore and even at a later date, if it is refurbished and completed, it will not attract much opportunities to sell. This is an unwritten reality in realty.

Almost all the eminent builders have only very limited number of personnel in their permanent payroll and the site personnel are engaged through Labour Contracts.

Big builders enjoy the benefits of Supply Chain Management. They are assured of price protection and supply assurance through Rate Contract. They are in a better position to manage their budgeting due to this.

Finance is a threatening issue to both small and also big builders. While small builders struggle and are also prepared to shelve the activities to later period, big builders manage the show with open market finance at terrible rate of interest. They have to resort to this as their commitment to customers is to be honoured and more than anything else, their reputation would become at stake, otherwise.

## RECOMMENDATIONS

Small builders should know the ground reality. Though it is their own money, budgeting is a must. Unless they heed to this aspect, they are sure to get struck.

JIT is perfectly alright. But, there are certain essential things such as Brick and Sand where the formula of JIT should not be applied - for risk factors are very much on the higher side. As per Labour Contract, payment to site personnel must be paid, even if they are kept idle (for no fault of theirs) due to other reasons. Brick and Sand should always be in buffer stock. Even Big builders make strategic errors in this aspect.

Exigency Budget may appear to be idly blocking the money. It is not really so. If negligence is shown in this, in the face of a catastrophe, it will become unbearably terrible.

For the sake of economies of scale, never deviate from plan. Rules are very stringent now and penalties are also pretty huge.



## Global Journal of Engineering Science and Research Management

The budget made should be stuck to, at all costs. This, of course, does not mean that it should be static. The budget should always be reviewed and if required, modified to suit realities.

The purpose of budgeting is what is stated on paper should be slated in action.

### REFERENCE

1. (Source: Pages 50 – 51. Book Name: Project Management. Author: S Choudhury. Copy right @ 1998 by Tata McGraw-Hill Education Pvt Ltd., 33<sup>rd</sup> reprint 2010. Published by: Tata McGraw Hill Education Private Ltd., 7, West Patel Nagar, New Delhi 110 008. ISBN: 13:978-0-07-460068-9. ISBN: 10:0-07-460068-0)
2. (Source: Pages 26 – 27. Book Name: The Business – Savvy Project Manager – Indispensable Knowledge and Skills for Success. Author: Gary R Heerkens. Copy right @ 2006 by the McGraw – Hill Companies. Printed in the United States of America. Director of Special Sales, McGraw-Hill Professional, Two Penn Plaza, New York, NY 10121 – 2298. ISBN: 0 – 07 – 144307 – X)
3. (Source: Page 340. Book Name: Business Logistics/Supply Chain Management. Authors: Ronald H. Ballou and Samir K. Srivastava. Copy right @ 2009 Dorling Kindersley (India) Pvt Ltd. Published by: Dorling Kindersley (India) Pvt Ltd, Licensees of Pearson Education in South Asia. Head Office: 7<sup>th</sup> floor, Knowledge Boulevard, A-8 (A), Sector 62, Noida 201309, UP, India. ISBN: 978 – 81 – 317 – 0584 – 1; 10 9 8 7 6 5 4)
4. (Source: Page no. 175, Book Name: Buying Professional Services. Authors: Fiona Czerniawska and Peter Smith. Published by: Profile Books Limited, 3A, Exmouth House, Pine Street, London EC1R, OJH. First South Asian Edition 2011. Copy right @ The Economist News Paper Ltd, Text Copyright @ Fiona Czerniawska and Peter Smith.)