

Reasons for Spiraling Costs in Construction Industry

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ABSTRACT

Construction Industry has the uniqueness that it offers jobs to millions of people irrespective of their qualification. As agriculture is a sector offering widespread employment opportunities, construction industry too is considered as a place for mass employment.

From the traditional labour occupied profession, it is moving forward to higher use of machineries thereby reducing dependence on labour and accelerating the process of construction and giving the benefits of mechanization to builders.

Keywords: *Wage Rates, Quality of materials, Caliber of workforce, Material Planning Process, Maneuverability, Logistical support, Flow of capital, Dissent and Distrust*

Scope of Research

Visits to construction sites and secondary data from web source.

DISCUSSION

In any field of business, the purpose of doing the same is for seeing a reasonable amount of profits. Achievement of profits is the motive of any business. Construction Industry is also no exception.

The profits depend on so many factors – both internal and external. Project team, Caliber of workforce, Uninterrupted flow of finance etc., contribute to internal ones and whereas Quality of materials, Commitment of suppliers, Logistical support, Cost of borrowing etc., come under external.

Constituents of Cost

Cost comprises Fixed cost and Variable costs. In construction industry, fixed costs are those such as Land cost, Project Planning and Approval costs, Various Testing costs before commencement of construction, Site expenses (fitness cost of land for making it construction worthy) etc.,. These are the basic costs which necessarily have to be incurred irrespective of the style of construction – whether it is normal conventional construction or posh luxurious construction.

Variable costs are those which are spent on Labour, Materials, Cost of finance, payment for use of construction machineries etc., as these vary according to the consumption and use.

Causes for shooting costs

Land Cost

Land cost is the major one if the apartments are less in number and the same is quite nominal if apartments are more. Hence, almost all the Builders plan in such a way that in costly areas, given the price of land, the cost can be reasonably spread if the number of apartments built are more. This leads to more number of floors. Goes without saying that more the number of floors, more complicated the problems are.

The land costs are going up day by day, necessitating shooting up of construction costs by builders. In fact, for the same size of apartment, the rate prevailing in June is costlier than that of the one prevailed in January. With the passage of six months time, the land cost having been frozen at a rate and deal concluded, longer the period of booking by people, higher the rates they have to pay to the builder. Perhaps, some rate gains to the builder, for the late bookings of the customers.

A glance at the following Table will show, how the land costs differ from place to place in Chennai itself.

Table I - Cost of Residential Plots in Chennai

Place	Locality	Rate per Sq Yd in Rs
Chennai North	Anna Nagar	1,43,055 – 1,69,448
Chennai South	T Nagar	1,45,350 – 1,75,950
Chennai Central	Kilpauk	1,48,792 – 1,59,502
Chennai West	Valasaravakkam	56,610 – 65,408

Net source:

www.99acres.com/property-rates-and-price-trends-in-chennai

This is the reason why the price hugely differs from place to place, given the same built up area. The growing mind set of people now is to prefer outskirts so that they have the combined benefits of price and also the less crowded area.

Material Cost

Material Cost is another major one determining the cost of construction. The three inputs that make out the major composition of material cost are Bricks, Sand and Cement.

Of these 3 inputs, Bricks form a formidable portion of material cost.

The brick rates have different price bands based on quality.

A simple glance of price of brick in Chennai will speak the truth.

Table II - Price of Bricks in Chennai

Quality	Price per Brick
Quality A	Rs. 5.50
Quality B	Rs. 6.25
Quality C	Rs. 6.75

Rates are ex Site Delivery.

Minimum order quantity 12,000 bricks/truck

(Net source: <https://www.indiamart.com/ssb-chamber-bricks/construction-bricks.html>)

There is no material that has undergone downward slope in price. All the prices are going up steeply. The price band of Bricks and Sand has very high volatility depending on the season. In summer, these will shoot up more than the heat.

Labour Cost

Construction Industry, like Agriculture, is labour intensive. Except a few renowned operators who deploy more of machineries in the project site, the general operators are quite comfortable continuing with more of labour. The size of the project and pattern of construction give them easy manoeuvrability of labour. Their preference is only reasonable.

One more point to be borne in mind is that the cost of labour differs from place to place and project to project. Even in the same locality, the labourer gets normal wage in one project and higher wage in another project. The nature of the project is the cause for this.

For labourers, given their contribution, they only prefer to choose a project which offers them a higher wages. In fact, this is why while bigger contracts have easy accessibility towards labour, smaller contractors find it difficult to get labour, leave alone skilled labour.

It is quite interesting to note that the wages of a labourer in a big project is more than the salary of an officer in a Company.

The labourers get more than, almost, double of the rates specified by the Government. A glance at the table below will show how the laborers are the demanded people, particularly, in construction industry.

Proceedings of the District Collector, Chennai District, Chennai I. Ref: C2/11250/2016 dated 31/05/16.

Rates of Daily Wages payable to the employees on the following categories for the year 2016 – 2017.

Table III - Wages prescribed by Government Vs what they get in Project Sites

Category	Wage as per Govt.	Actuals at Site
Mason	Rs. 290/-	Rs. 700/-
Painter	Rs. 337/-	Rs. 750/-
Plumber	Rs. 337/-	Rs. 700/-
Electrical Asst.	Rs. 470/-	Rs. 750/-
Carpenter	Rs. 373/-	Rs. 900/-

(Net Source www.chennai.tn.nic.in/Daily%20wages.pdf)

From the statement, we can notice one thing that is the wages for Carpenter is more than that of others. The reason is carpenter job is painstaking one. Another important thing is that the supply of carpenter is less given the demand for them.

Well chalked out Plan and Project Specifications

The very big Builders draw their plan and project specifications, just once. They take a longer time in planning and that's why they are faster in execution.

Their specifications are fixed and will not change from customer to customer. In other words, customers have no option in asking for the construction pattern as per their choice. This is not so in the case of smaller builders. They agree to almost all the demands of the customers

and this results in different style of construction of same sized apartments in the same plot. While the differences are only minimal, the central fact is that they are customer dependent. Frequently changed project specifications will only delay the execution and will also have a bearing on the performance of the project.

Workers are also getting exasperated, if they are asked to do the same job again and again. The general attitude of workers is that though they are paid wages and are expected to do the work as instructed by Site In charge, they do not like to do the same job more than once. This was found evident in all the sites visited. (Net source: www.ijetmas.com/admin/resources/project/paper/f201509231442990716.pdf)

How costs are soaring up?

Poor materials handling and Logistics support

Almost, all the small builders tend to bulk purchase and prefer to store at their site. This is because, they are apprehensive of the price increase and possible delayed delivery of the materials. This is especially so in Bricks and Sand, particularly in Summer Season.

Major Builders do not worry much on this as they have a sort of Rate Contract with Manufacturers by fixing annual off take and with a committed delivery and price from the manufacturers in turn.

In spite of the excellent understanding between the builder and the supplier, in a major site, it was found that the supply of marbles was inordinately delayed by the manufacturer and the project was badly hit.

For about three days, the builder had to pay wages to the marble laying specialist masons, for no work done by them. The manufacturer simply attributed to non availability of truck as the reason for the delay. The three day wages was a wasteful expenditure to the builder. This is why, the logistical support must be firmly tied up. This is only the job of the manufacturer and not the builder. But the sufferer is the Builder in the event of delay.

(Net source: <https://www.irjet.net/archives/V2/i8/IRJET-V218117.pdf>)

Dissent and Distrust between Supervisor and Workforce in Execution

This was markedly seen in one site. The instructions of the Supervisor were half heartedly taken note of by the workers. This perfunctory performance led to repetition of the job, leading to cost penalty.

The Supervisor was a fresh graduate and whereas the whole of workforce was a group of elderly and experienced people.

The young Supervisor wanted his theoretical knowledge quickly transformed into actions at the site. This was opposed to by the work force. Their age and experience in the job resulted in altercation. Consequently, with over instructions from one side and stiff resistance from the other side, only resulted in delays and recurrence of the job. Besides delay, cost penalty was suffered by the builder.

For no fault of the Builder, the project suffered money and also time just due to the misunderstanding between the Supervisor and Workforce.

Many Project Managers insist that there should be a cordial and understanding relationship between the Engineer and the Workforce. Some Project Managers, have it as a practice that once in a month, a ‘friendly meeting’ is organized between the supervisors and workers so that cordiality is always there which is a must for smooth functioning.

Growing dissent will only result in stoppage of work by the workers and fleeing of them to another project. The project officials only will have to mellow down themselves.

Cost of Capital getting Costlier

Capital or uninterrupted flow of finance into the business must be ensured. However good the suppliers are and whatever be the cordiality between workforce and supervisors, everything will take a twist if payment is not made as promised to them.

While shop people would wait for a reasonable time, even beyond the credit period, the work force will not. If delay occurs in disbursement of cash to them, just in two incidents, they will flee away to a different place.

The interesting truth in construction industry is that the labourers are always in demand and are welcomed by competitors.

Project officials do not want to take risk with labourers. Hence, the builders would not mind even going in for exorbitant rates of interest for capital.

The interest cost is literally eroding the profits. The Builders have to necessarily incur this, for the whole project will come to a standstill, if struck with flow of funds.

As the builders have no choice to pass on the burden to others (customers), they have to accept it themselves. This is a frequently occurring factor for spiraling cost.

(Net source: ijaresm.net/paper/VOLUME_1/ISSUE_4/14.pdf)

CONCLUSION

Construction industry is still a labour intensive one.

Workers have a say in the bargaining with the Project Officials and Builders. Workers always have an upper hand in the construction projects.

The builders would not mind foregoing an Engineer but definitely not workers. The reason is very simple. Workers are always a group of people. If the leader feels insulted, he would instigate the other workers, to look out elsewhere for a pack off.

The vacancy of an Engineer can be easily filled in. The Builder himself can manage till such time an alternative arrangement is made. Certainly, he cannot even think of the work force vacating the site, as this would only result in huge loss to the builder.

The delay in receipt of materials will hamper the work. But the workers, nevertheless, need to be paid. The logic of No Work No Pay will not apply here. If applied, the project will come to a standstill.

The major worry of builders is besides work force, Bricks and Sand. They do not much bother about steel and cement as these are easily available and different sources are there.

For bricks and sand, demand is more and supply is not matching. There is always a nagging apprehension in the minds of builders.

Finance is yet another thing contributing to raising costs. Capital borrowed with excessive interest rates from private lenders will force the builders to increase the cost to some extent though they absorb a major chunk themselves foregoing profits.

The poor logistics support by Suppliers results in avoidable delays in the completion of the project. Not only does it contribute to project delay, but also wages to workers, for no work done by them till materials arrived. This kind of a situation, though not repetitive, does have an impact on cost of the project.

RECOMMENDATIONS

Selection of site is to be carefully done. There is no point in selecting a costly site, just because it is in the city. The land cost is quite prohibitive nowadays. Even Mega Builders who are in the field for more than three decades, burnt their finger by wrong selection of site. Although Repetitive Glib Advertisements are thrust in media, it has not evoked any significant response, many builders opine.

Those who can afford for such luxurious apartments also do not wish to book them, for fear of being caught by IT officials.

The spiraling costs have resulted in abrupt stop of further construction. Many half built constructions bear ample testimony to this

Never Venture on any Too Costly Project, however great the benefits may be to the purchasers for there will be hardly any purchaser for same.

Watering money on luxurious constructions is a waste. The pressure of spiraling cost on many builders is on this score.

Always, ensure Multiple Suppliers. Whatever be the genuine reason ascribed by the Supplier, it is the builder who is going to ultimately face the loss and the costs. Hence, different suppliers of comparable quality is always advisable and a Must, in the present scenario.

Never have excessive dependence on one sub contractor. For work force, at least two contractors is advisable. If the builder is having construction at different sites concurrently, different subcontractors would be most ideal.

Basic amenities to work force should be thoroughly ensured. This is one of the reasons for the fleet of workers to different projects. This is more explicitly felt in the case of migrant workers.

Though should be cordial and friendly, the Project Manager and Supervisor, should always maintain distance with workforce. In one site, the Supervisor was seen drinking with the workers. What could be the respect of workers for that Supervisor? What sort of command will he have on them?. While this can be gently brushed aside as a personal issue, what kind of construction would take place in an inebriated condition?

It is the duty of the builder to ensure that his staff are genuine, knowledgeable and committed in performance. As these three will only constitute leadership quality, which is a must for Project Personnel, attention should be paid on this.

It is also noted that a Project Leader with vision and command, brings in perfection in execution and avoids delays and cost penalties.

Never venture too big projects. Instead of taking one mega project, it is shrewd to have many small projects, as risk element is less and completion is faster, costs are lesser and profits are more.

As far as possible, use of more of machines is to be explored. This gives the twin benefits of precision and perfection in execution.

Never do excessive borrowings. The project may end in a smoke.

More of technology in construction is always safer.

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