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Introspection on professional performance of contracts

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The performance by client, contractor and consultant/engineer in construction projects need introspection for ensuring better professionalism with the aim of completion of the project in time, with economy and quality. With respect to quantum and time, quality consciousness is vaning. The vision and mission should be, to have fair conditions of a contract, reasonable rates, each adhering to the reciprocal responsibilities and perform professionally. The client, contractor and engineer should work in mutual cooperation, coordination and trust as a team.

In private enterprises, where the private entrepreneur apart from taking all risks has to finance, design, construct and maintain, the mind set has to be more facilitative and innovative so that every effort could be made to resolve the bottlenecks and complete the project early for yielding the fruits to both employer and entrepreneur/contractor. Coordination and cooperation of different government departments may be involved in this process. Leadership skills along with the art of managing conflicts accommodatively and ethical approach should be used in achieving the goal.

In case of differences of opinion, every effort should be made to appreciate the other person's view and

aim for an amicable settlement. Disputes could be settled through negotiation or arbitration innovatively. Arbitration process should be facilitated timely and the awards accepted, not challenged. Awards challenged in the court may take a very long time for justice. 'Where there is a will, there is a way' is an apt quote for projects.

Scope

There is a surge of activities in construction Industry now. The construction industry is next only to the agriculture industry in terms of employment is also unorganised with many players and employs manpower of more than 30 million.

The scope of the project should be critically examined from all angles. Depending on the type of project and complexity, consultants could be engaged for investigations, drafting designs, specifications and engineering. Then prepare the estimates realistically keeping in view the escalation for the period and decide on the method of funding. Necessary approval from the environment department and relevant authorities should be obtained in time so that the same does not become a deterrent in starting the work.

Tendering

Type of contract

Depending upon the nature of work, the type of contract should be decided. Each has its own advantages and disadvantages and has to be dovetailed with the nature of work and complexity.

- Item rate contract might be simpler to prepare with key drawings, but in operation it may be cumbersome as the payment is related to the quantum of work done, involving a large number of measurements in big projects.
- Lump sum contract can be resorted to when detailed drawings and specifications can be prepared with payment stages, as well as variations. Variations during site execution should cause no surprise and should be expected.
- Cost plus contract is entered into when the scope is undecided and is open ended such as in research projects. Clear understanding regarding scope and time is essential.
- Turnkey contract can be resorted to for complex projects where different special items/services are taken up by the main contractor either by himself or as a joint venture for design, drawing, execution, testing etc. The investigation responsibilities and variations have to be made foolproof so that the scope of disputes is minimised. This is easily said than done and hence the need for minuteness in investigation, detailing, design and scope requirements.
- B.O.T. privatisation type of contract is used when the funds are limited or not available but the development is essential. In this case, major responsibilities of designing, financing, construction and maintenance are shifted to the entrepreneur, with suitable provision for recouping the cost of financing and making profit in the form of toll or other income.

Balanced tender conditions

The Contract Act is more than 100 years old and has not been updated. Even after nearly 60 years of independence, there are no uniform tender conditions even amongst state or central government, leave alone public sector and private firms. The efforts of the Planning Commission to bring out a modal contract in

1969 have not borne any fruits. The tender conditions are normally one-sided leaning towards the employer and not fair. In internationally aided projects, the aiding agency insists on adoption of FIDIC (Federation Internationale des Ingenieurs-Conseils / International Federation of Consulting Engineers) conditions, which are relatively balanced. Of late, there is a tendency in some organisations to adopt conditions similar to FIDIC.

In fact CIDC (Construction Industry Development Council), the apex trade body for the construction industry and sponsored by the Planning Commission, has brought out new model tender conditions for adoption. It is hoped that at least in the future, we shall have uniform tender conditions that is fair to both parties.

Interest for delay in payments

It is high time that the tender conditions contain shorter period for payment of bills after submission by the contractor or else interest liability should be included. After all the contractor is in a commercial transaction with profit motive and without periodical payment of dues, the progress of work suffers causing delay and escalation. FIDIC provides for this, but everybody is afraid to include the clause, as it is an avoidable cost and the onus of taking responsibility comes in.

Time period

Adequate time period should be provided for execution, keeping in view the monsoons, site availability for doing the work, utility shifting by other departments/agents, etc. This should be further related to the requisite equipment/labour and methodology of work. In a civil engineering contract time is of the essence of the contract, but has no meaning, with so many bottlenecks and breaches affecting the time schedule. The penalty for delay should be reasonable and not abnormal.

Bonus

Every contract contains a clause for levy of penalty for delay. Similar clause is hardly found for payment of bonus or incentive for early completion. This will infuse some motivation to complete early and moreover the asset is available early for use with less escalation. Though traditionally Indian contracts are not completed in time, introduction of bonus clause for flyovers in Mumbai, N.H.A.I. road development works, etc. have resulted in early completion of the projects. FIDIC contract has provisions for bonus clause.

Escalation

Escalation should be provided with contract. Rates of POL (petroleum, oil and lubricants), cement, steel, etc keep varying and hence compensation is needed and hence compensation is needed to avoid speculation in tender. Restriction of escalation to the original period of construction and not to the extended period is another practice which needs to be changed.

Pre-bid meeting

In case of big projects and complex works, pre-tender meeting should be conducted for briefing about the project, appreciate the views of prospective applicants, and amend the tender conditions accordingly.

The applicants should make use of the opportunity to put forth their viewpoints after thorough study of terms and site conditions/deficiencies. Adequate time should be provided after issue of tenders for the applicants to go through the tenders, visit the site and communicate their views. At times the applicant do not use this opportunity and complain afterwards about the one sided terms and conditions. Sometimes the client does not give sufficient time after issue of tenders and conducts the pre-bid meeting just for a formality and declare that tender provisions shall prevail. This is not right.

Pre-qualification

In high cost works/complex works/special types of works, it is always preferable to pre-qualify the applicant. This could be in the form of two cover system to save time and would ensure that the client gets financially and technically qualified suitable contractor for the type of work in question. Improper assessment or rejection of tender may lead to legal tangles which should be avoided at all cost.

Bidding and acceptance

Sufficient time should be provided for bidding after the pre-bid and issue of amendments. There are cases where the construction period is one year and the validity of tender is 4 or 6 months which is too long. The tender acceptance should not be lingered long and should be within a reasonable time. If there is no provision for escalation, the profit margin gets reduced for the contractor. In case of high value tenders, detailing submitted by the lowest applicant should be studied in more detail apart from the cost estimates. The practice of negotiating with other than the lowest applicant is unethical. Negotiations with applicants should be conducted by a committee to maintain transparency and the members should have good negotiations skills.

World Bank, etc. do not permit negotiation or even re-invitation. In case there is no scope for reduction especially for special works or projects in remote areas, one should not hesitate to accept the lowest applicant after approval. Re-tendering should be the last resort as further increase in cost is not surprising. Hence critical judgement of the tender in terms of complexity and competitiveness is needed. The applicant should quote reasonably for professional performance as quoting low to grab the job and later do bad quality work or make hefty claims to bridge the expected losses is unethical and unprofessional.

Quoting high, forming groups or cartels are unethical practices that should be eschewed. Nevertheless, tendering is an exercise like gambling with heavy risks and nobody knows who will get the work. In case a contractor does not have sufficient work with him, but possess adequate equipment and manpower, he may at times quote less for least profit so that his resources are actively engaged. At times rivalry and politics also lead to low quotes.

The tender should be accepted only when the work can commence without any delay or breaks. In case the land itself is not acquired or site is not ready for commencing the work, issuing work order has no meaning. Since it would invite disputes at the inception stage itself. In such cases, the work order can be issued for mobilising resources but commencement of work could be done at a later date specifically agreed upon.

Work management

Aim

The trinity in the contract, the 3Cs – clients, contractor and consultant/engineer should perform their role professionally with quality and in time by pooling their resources effectively. Breaches by any of the parties would cause under utilisation, idle equipment and manpower leading to delay in work, which means additional cost. Hence concerted, coordinated and cooperative professional approach is needed in completing the project. The project leaders of the client, contractor and engineer should enthusiastically mobilise their technical, commercial and managerial skills in this respect.

Contractual relations

Contractual relations are basically human relations with legal obligations and responsibilities. The contract creates an association between interested parties who have different functions but with the common goal

of completing the project. The parties in a contract therefore are not competitors in any way, but rather joint partners contributing their separate talents and efforts to produce the outcome agreed in the contract. In spite of this accepted premise, conflicts do arise. Many of them can be traced to personal differences, desire for credit or one-upmanship regardless of what might be good judgment and acceptable conduct. The most effective and simplistic approach is the observance of good business ethics by all the parties concerned.

The elements of satisfactory contractual relations are dependent basically upon the following characteristics and qualities that should apply to the parties of the contract.

- Good reputation
- Financial capability
- Proven competence
- Managerial ability
- Organising ability
- Technical knowledge
- Flexibility
- Initiative
- Satisfactory performance
- Professional approach

Good contractual relations and business ethics normally start with these and must be maintained throughout the periods of initial bidding, negotiation, execution, and settlement of disputes, if any. In other words it shall be for the whole period from tender stage to settlement of final accounts including maintenance.

Since all the events that can transpire during the course of execution of a contract cannot be foreseen or planned, it follows that no universal formula can be offered to forestall their occurrence. Hence, the best thing is to be aware of the pitfalls and follow good practices. There is no substitute for good business ethics and mutual trust.

Mission

Achievement of the set goal can be accomplished by formulating an acceptable programme for the

mobilisation of material, men and equipment. Periodical progress reports should be submitted by the contractor/consultant. Periodical reviews be it weekly/monthly/quarterly should be proactively made at different levels, to assess the progress achieved with respect to the planned schedule. This would help in taking remedial action in case of lag. Pragmatic approach with empathy would help to motivate all parties and lead to progress even with odds. Methods that would enable to make up the loss of time should be ascertained and resorted to compensate/avert the delays anticipated/accrued.

Cooperative discussion rather than authoritative direction would ensure better results and relations. If there are some costs involved in accelerating the work, the decision to incur the cost or accept the delay should be deliberated and decided. Quality should not be sacrificed for the sake of quantity and time. Quality and time consciousness should be inculcated especially with respect to men, machinery and material.

Coordination, determination, commitment, innovation and empathy, all of these can play a great role in such exigencies. Thus, the tendency should be to work like a joint venture of 3Cs to achieve the goal rather than blaming each other for the delays and cost. Attitudinal and mindset changes for ethical and professional performance is essential which can pave way for remarkable results.

Role of the client

The client should perform his role as enshrined in the contract to enable performance by the contractor.

For example:

- Ensure proper soil investigation to avoid radical change in foundation.
- Ensure land is acquired and is without encumbrances.
- Ensure that environment and all the other necessary approvals are obtained before the start of work.
- Ensure permission for tree cutting.
- Ensure that the utilities are removed enabling the progress of work.
- Hand over the site to commence the work, in full or parts, as per the contract.

- Give water supply/electricity supply at the requisite location in the desired quantity for the work.
- Make available the detailed drawings and specifications for advance planning and execution so that the work does not suffer for want of the same.
- Ensure proper approval from relevant government departments/agencies so that there are no work-stoppages.
- Changes in drawings during execution should be minimum if it cannot be avoided.
- Avoid suspension of works as the same cause disruption of labour, dislocation of plant and machinery leading to time and cost overruns.
- Ensure approval of changes, sub-contracting firms and materials.
- The bill duly certified by the engineer/consultant should be paid within the time period specified in the contract.
- In case the consultant does not certify the bills prepared by the contractor, probe and remove the bottleneck so that the contractor is paid for the work done lest he may not progress for want of cash flow.
- Ensure that the consultant cooperates to ensure progress of work.
- The decision on drawings, designs, rates for new items, etc. should be promptly taken.
- Consider the inevitable extension of time, and disputes as per the provisions of contract and in spirit of natural justice.
- Consider the disputes with an intention to solve rather than drag on.
- Cooperate to proceed for arbitration of unresolved disputes by appointing the arbitrator and be part of the proceedings.
- Avoid challenging the arbitral awards and try to negotiate a settlement, as the courts take longer time.

Peculiar causes

Non performance of client's responsibilities would cause additional time and cost to the contractor which in turn may have to be borne by the clients only. Many clients do not adhere to their commitments, but shift their responsibilities or dilly dally in taking a firm decision. Risks may be involved in taking decision in one case which may have wider implication in some other case. This is true especially with respect to costs. Fear of technical examination or audit is another aspect which deter decisions. These are some intricacies for introspection. It is high time the legacy of distrust is flushed out a policy of trust and professional responsibility should be induced upon. This may be a tall order but nonetheless it should be attempted by all parties concerned.

Role of contractor

The contractor should know his strength and weakness, and professional capacity to manage and execute the project before bidding for the work. He should form suitable joint ventures, appoint capable men and procure the needed machinery to ensure that he is able to professionally perform the tasks. He should quote a reasonable price after proper site inspections understanding the scope and complexity of the work. Once the contract is accepted he should take up the job with commitment and dedication. He should :

- Mobilise adequate men, machinery and able managerial and supervisory personnel.
- Formulate the work programme in consultation with the consultant and client to complete the project within time.
- Identify and take approval from the consultant/client for the materials required periodically.
- Prepare quality assurance manuals, appoint quality control personnel and ensure quality works as per the specifications and standards. Perform quality assurance tests and maintain records of the same.
- Monitor progress of the work diligently.
- Participate in the progress review meetings and take action to overcome shortfalls by addition of labour/equipment.
- Periodically submit the bills as required, enabling certification and payment.

- Whenever changes, variations or hindrances are involved, bring out the facts promptly and furnish details of cost and new rates.
- Provide details as required by the engineer to determine the extension of time as well as the cost.
- Appreciate and cooperate with the engineer and client to ensure that the dispute/claims are sorted out amicably in spirit of give and take.
- In case the disputes are referred to arbitration, cooperate with the client and arbitrator in arbitral proceedings/conciliation proceedings to settle the issue amicably.
- Do not make false or hefty claims.
- Cooperate with the consultant to enable decision on claims.
- Do not challenge the arbitral award, if it was not favorable. Awards challenged in the court take lot of time, even decades, for justice.
- Mutual cooperation rather than confrontation, flexibility rather than rigidity, trust and faith, should be the golden ethos, for ethical and professional performance.
- It should also be noted that goodwill earned will lead to a lasting bond and mutual appreciation.
- Conduct progress review meetings periodically to identify bottlenecks and suggest alternative measures so as to adhere to the schedule.
- Examine in detail the extension requirement caused due to the fault of the client/engineer/contractor and approve the same.
- Avoid and reduce variations/changes in design during execution as the same causes work disruption and delay.
- Clarify ambiguities in drawings/specifications/BOQ (bill of quantities).
- Assess correctly the claims/variations and certify the same in coordination with the contractor and employer.
- When a decision under dispute resolution clause is sought, the decision should be given promptly as a quasi arbitrator after detailed examination of the full facts, in accordance with the contract and circumstances of the case. He may also coordinate discussions between the parties for a quick decision but he should not get influenced by the client or contractor while giving his decision.
- Cooperate, coordinate and act in a fair manner to gain the confidence of both client and the contractor.

Role of engineer

The engineer could be an employee/consultant of the client or a separate consultant employed for the purpose. The engineer should perform duties diligently with technical soundness and contractual fairness in coordination with the client and contractor such that the progress of work is facilitated. He should

- Give drawings/designs for execution in advance for planning the procurement of materials and men for project execution.
- Approve the materials promptly after he is satisfied.
- Facilitate quality work with adequate personnel.
- Certify the bills promptly enabling payments for main works and escalation.

In other words, the consultant/engineer functions as a catalyst and facilitator in the whole exercise of contract management. He is a bridge between the client and contractor, enabling proper and adequate performance. Hence, he plays a very crucial role in the success or failure of a contract/project. Unprofessional behaviour can put the project in jeopardy causing financial burden either to the client or contractor unnecessarily. Introduction of a new consultant in the middle of the project phase does create problems. Hence, there is a need to select at the outset consultant who is properly qualified and experienced for the work. These are a few pointers for the client and consultant to appreciate and abide.

Quality consciousness

There is a need to adopt and follow the requisite quality standards and requirements. There are many century old structures in India which are still strong and against this background, there are many recent structures which have failed. Many show signs of weakness within a decade and then resort to rehabilitation. Due to massive

quantum of work and the high speed of execution, quality requirements, have been overlooked. There may be records to prove that everything is done perfectly well. But, the reality is different. It is hence essential that professional commitment in maintaining requisite quality should be adhered to by the contractor, consultant and client.

Privatisation contracts

India is a vast country that needs large developments. In view of the shortage of government funds for development, many infrastructural projects are being developed under Public-Private Partnership (PPP). Many road works/port works are classic examples. In non-viable projects, the government provides some subsidy also. The cost of project and profit are permitted to be earned through tolls, handling of cargo, etc. The period of permit varies from 20 to 30 years depending upon the contract. Projection of traffic for such long years (more than 5 years) is quite risky as the same depends upon various factors. Hence, there are some successful projects and some problematic projects as well.

We are still in the learning curve. The failures of Mexican and Malaysian highway projects are not yet fully grasped. In all these neo-projects, the contract conditions have to be fair and even. The present scenario needs introspection. Detailed Project Reports (DPR) are not given with the tender and if it is provided, it has lot of deficiencies. As the responsibility is put on the contractor, the client or consultant do not take intrinsic interest to provide the required inputs and analysis to make the DPR complete, useful and reasonably correct and informative for proper understanding of the project enabling the entrepreneur to analyse and quote accordingly. It is just not possible for the entrepreneur to do all the surveys and investigations within the short duration of tender to analyse the scope of work critically and estimate the cost of work. Hence, he has to rely solely upon the documentation provided along with the tender which typically lacks a lot of critical information.

The responsibility of getting the various approvals, environmental clearance, shifting of utilities, land acquisition, etc. are dumped on the entrepreneur, which consume a lot of his time and thus reduce the time available to complete the construction. In short, pre-planning for execution of projects is quite deficient and needs to be improved.

The people handling PPP projects have to be impartial reasonable and responsive with innovative ideas to sort out the problems with empathy and pragmatism, and

thus ensure success of the scheme. In such projects, the art of managing loss or profit gains more importance as the entrepreneur has taken up the work with profit motive. Central government and planning commission are trying to address these critical issues in their model concession agreements. But, amicable solutions are still not easy to achieve.

'Take it or leave it' approach would dampen the whole spirit and vision of the concept of PPP. Flexibility rather than rigidity should be the guiding principle. The objective should be to find ways and means of solving the problems/disputes in a 'Win-Win' direction. Apart from technical and financial expertise, coordination, negotiation, managerial skills and professional ethics can alone ensure success.



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