CAPITAL PROJECTS IMPLEMENTATION

2.4 Over the years, I have been reporting on the shortcomings encountered during implementation of projects. These include, among others, excessive delays, variation costs, inadequate supervision of works, cost overrun, sub-standard quality of works, inaccurate project conception, compensations paid to contractors in the form of damages and non renewal of performance bond and insurance policies on expiry. Capital expenditure form a major part of Government budget. These shortcomings call for an urgent need to review the whole concept of project management from inception of projects to final handing over.

During the past three years, Government spent a total sum of some Rs 23.1 billion on project expenditure as shown below:

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Project Expenditure (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>7,887,111,520</td>
</tr>
<tr>
<td>2004-05</td>
<td>7,129,515,909</td>
</tr>
<tr>
<td>2005-06</td>
<td>8,155,055,512</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23,171,682,941</strong></td>
</tr>
</tbody>
</table>

The following are the unsatisfactory features that I have frequently noted on capital projects implementation.

**Project design**

Basic details were not often considered for a proper design. These include, inadequate site survey in terms of topography of land, information relating to ownership of site, boundaries and other associated matters. Client requirements were not clearly defined resulting in recurring changes of works during construction stage.

Inaccurate design led to delays in completion of projects, excessive variation of costs, and cancellation of projects, with the accompanying costs.

**Delays**

This is an item very common on projects implementation. Projects with delays of more than two years were noted.

The causes of delay were inter-alia:

- Modifications of original design
Inadequate resources deployed by Contractors on site. In some cases, contracts had to be terminated due to poor performance of Contractors. This resulted in increase in contract price following re-award.

Adverse climatic conditions

Unavailability of and shortcomings in contract drawings and plans. This resulted in Contractors work being disrupted.

Late ordering of contract materials.

Late nomination of sub-contractors for service contracts. At times, service contracts are awarded long after completion of building infrastructural works. This may also give rise to additional payment in terms of loss and expense.

Delays resulted in changes of users’ needs, disruption of cash flow of client Ministry/Departments, increase in cost due to extension of time and cost overrun.

**Site Supervision and Monitoring of Works**

The main object of site supervision is to ensure that requirements as defined in the contract documents are correctly interpreted and works are carried out accordingly and that any problems are satisfactorily resolved. Representatives of all the parties to the contract were not always attending site meetings.

Poor quality of works on sites is another recurring feature of my reports on capital projects. It occurred mainly because of use of sub-standard materials and works not done according to contract specifications.

In some cases poor quality of works became obvious well after completion of projects, when it should have been resolved during construction stage through proper site supervision and monitoring of works.

**Consultancy**

Due to increase in number of projects, the Government is resorting to consultancy services for design and supervision of projects. Consultancy services are becoming more and more costly.

Consultants are mostly remunerated for services provided at a percentage of contract value. Under this type of payments, an increase in contract value automatically results in increase of consultancy fees.

A case was noted where the percentage rose from four per cent to seven and a half percent over three years following re-award of consultancy services to the same Consultant.
I have also reported on shortcomings on Consultancy services relating to design of projects including inaccurate drawings and plans. At times, Consultants themselves assessed and approved extension of time.

With a view to obtain more fees, Consultants may encourage variations, re-design and change in scope of works.

Very often, it seems that the supervising Consultants work more for the Contractor than for the client Ministry/Department.

**Variations**

There are always thousand and one reasons provided for variations. Some of the reasons provided were:

- Scope of work loosely defined resulting in changes in quantity of works included in the contracts.
- Inadequate verification of site to ascertain the suitability of its conditions for the design of the project.
- Delays in implementation resulting in changes in design to meet current needs.

Variations resulted in an increase in cost, additional claim from Contractors, increase in Consultancy costs (if payment based on actual contract value) and delays.

**Registration of Contractors**

Grading of Contractors depend on resources available such as manpower, equipment and finance. In several cases, Contractors were offered projects under the appropriate grade but could not complete the projects on time due to inadequate resources. This arose partly because of a multiple of contracts were awarded simultaneously to the same Contractor.

Government even resorted to termination of contracts and the remaining outstanding works took time to be re-awarded and in some cases, were re-awarded at higher price.

The whole process of registration, grading, deregistration of Contractors and evaluation of Contractors’ capacity and capability need to be reviewed.

**Capital Vote Management**

Due to lack of proper planning, funds earmarked for specific projects were not always fully utilised for the purpose they were intended. Funds had to be re-allocated to other items of expenses.
In one particular Ministry, an increasing number of projects were being designed but were not awarded because of changes in priorities and financial constraints. Consultancy fees were paid for design.

**Performance Bond and Insurance Policies**

A performance bond is a security for proper performance provided by a Contractor. It entitles clients to make a claim up to the amount of the bond in case of default by the Contractor.

Insurance policies provide cover for risk of accidents, injuries and damages in the site of work.

The performance bond as well as the insurance policies must be valid up to the end of maintenance period. Duration of projects is often extended due to delays and additional works resulting in expiry of the performance bond and insurance policies, sometimes, during construction stage. Very often, they are not renewed upon expiry.

**Recommendations**

Given the weakening economic situation, it is imperative that necessary measures be taken for an effective management of projects, and hence avoiding unnecessary cost overrun on capital projects.

Hereunder are some suggestions:

*Setting up of a Regulatory Body*

The Government may consider setting up a body to regulate the construction industry. The body would be responsible to provide guidelines for proper implementation of projects from inception to completion and actual occupation.

This body would regulate the following areas of projects implementation:

- The issue of construction permits to client Ministries/Departments. The body would ensure that site condition and location, availability and completeness of structural and architectural drawings are in order prior to the issue of permits.

- During construction stage, whenever variations works exceed a percentage (say 20 per cent) of the project value and for every subsequent variation, the project has to be reverted back to the body for a new permit.

- Site inspections would be carried out to ensure that works conform to drawings.

- The issue of certificates authorising occupation of the new infrastructures.
Other Suggestions

- **Consultancy Services.** When fees are based on a percentage of contract value, there is a tendency for frequent changes of design along with variations mostly when the Consultants themselves make the recommendations.

  I suggest the payment of a lump sum fee instead of a percentage fee.

- Client requirements at inception stage of projects must be clear, unambiguous and should not be subject to major changes during construction. This is vital for timely completion and to be contained within budget.

- Before embarking on projects, it is imperative to consider their financial impact and priorities. Often funds earmarked for a particular project are either re-allocated or unutilised due to changes in priorities.

- The criteria for grading of Contractors need a review. There were cases where Contractors had inadequate resources to complete projects though contracts were awarded under their appropriate grades.

- In the case of projects involving main Contractors and nominated sub-contractors, proper project planning is important in terms of timely award of different contracts.

- Site supervision must be reinforced to ensure that works are carried out according to specifications. All the representatives must attend site meetings. Provision must be made for sanctions against Consultants/Project Managers and Contractors in case of work not done according to specifications and for poor design.

- The rate of liquidated damages and performance bond may be increased to prevent Contractors from delaying or abandoning projects.

- Conditions of contract may be amended to provide for a defaulting Contractor to make good any increase in contract value of uncompleted works on re-award.