

# Construction Project Management

Project Management: Project management is the art and science of mobilising and managing people, materials, equipment, and money to complete the assigned project work, on time within budgeted cost and specified technical performance standards.

Construction Management: may be defined as the management in which group of people of different categories works together, to execute the project economically without affecting the quality in a well planned and organised manner.

- Construction work - most widespread activities
- Construction Industry - ~~major~~ major activity in India contribute 10% of GDP. Playing a major role in the development of the national economy.

- The need of professionalism in Construction Management

## Necessity of Construction Management

- (1) Co-ordination between different agencies
- (2) Economy in Construction
- (3) Development of management and machinery
- (4) Speed of Construction
- (5) Quality & Control of materials and workmanship

## \* Objectives of Construction Management

Main objectives are:

- (1) Completing the work within estimated budget
- (2) Completing the work within specified time.
- (3) Quality of materials and workmanship should be better.
- (4) Work should be executed as per specifications.
- (5) Safe and satisfactory working conditions for all personnel and workers.
- (6) Taking sound decisions → through delegation of authority
- (7) Motivating people
- (8) Organisation → work as a team
- (9) Economy in construction.

## \* Factors involved in Construction Management

Main resources needed are:

1. Man power
2. Money
3. Materials
4. Machinery

## \* Functions of Construction Management

OR Phases of Construction Management

1. Planning and scheduling
2. Organising
3. Staffing
4. Directing
5. Controlling
6. Co-ordinating
7. Communicating

# Functions of Construction Management

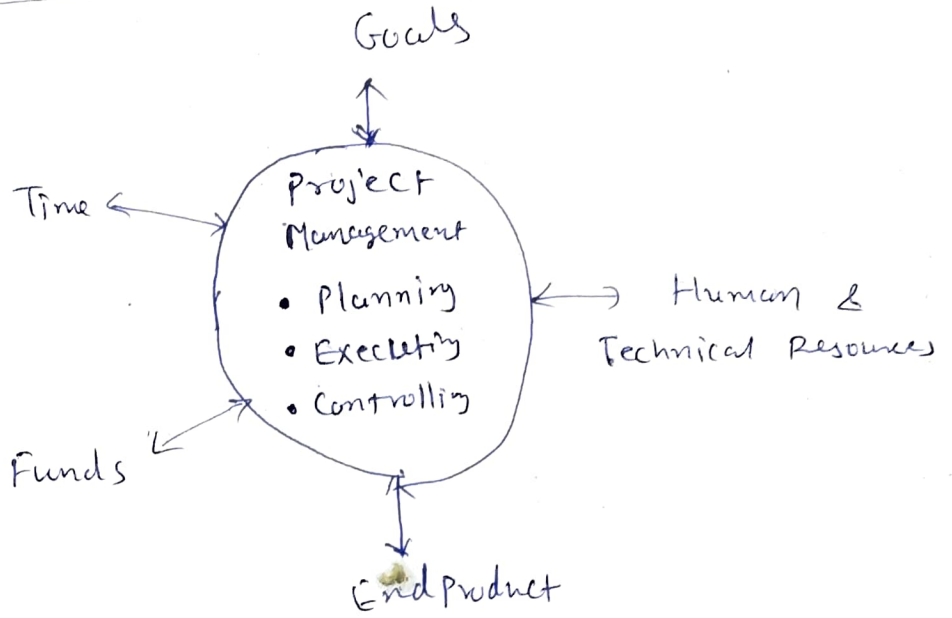


Fig: The Element of Project Management

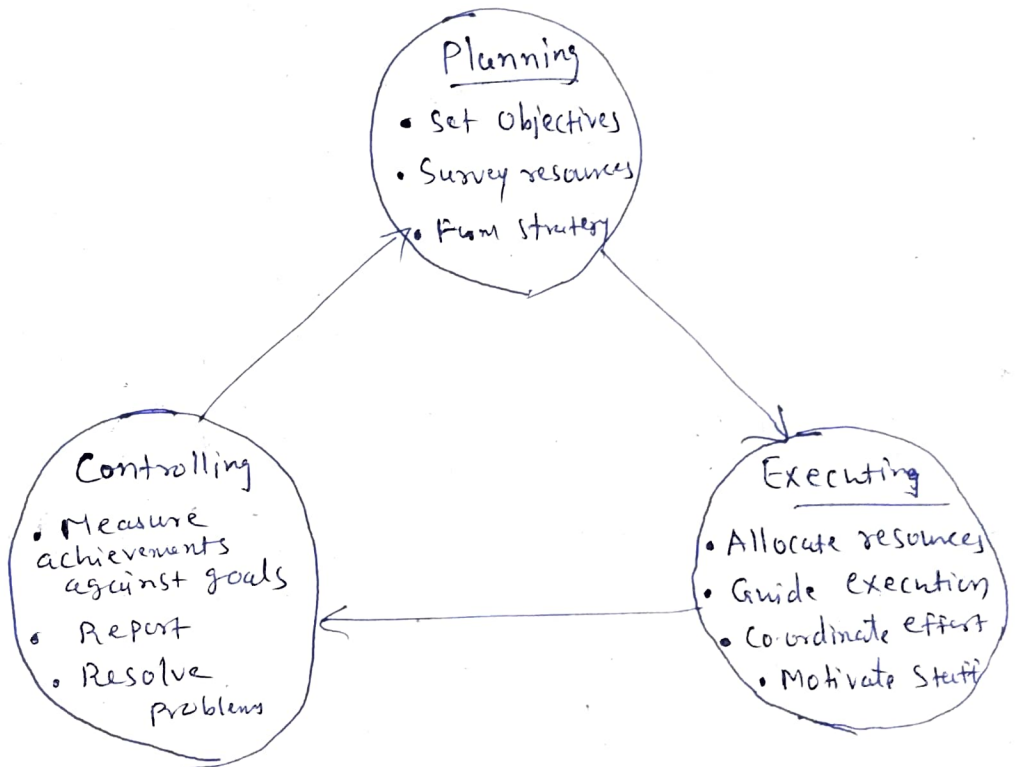


Fig. The Managerial cycle

## (1) Planning and Scheduling

- Formulation of number of alternative realistic work plans
  - What to Do or How to Do?
  - Scheduling is the fitting of the final work plan to a time scale. It shows the duration and order of various construction activities.
- When to DO?

## (2) Organising :

- Division of total construction work into manageable sections.
- Organisational structure of the project

## (3) Staffing :

- Staffing is the provision of people to fill the ~~pos~~ positions created in organisation.

## (4) Directing :

- Training sub-coordinates to carry out assigned task, supervising their work, and guiding their efforts.

## (5) Controlling :

- Involves a constant review of the work plan to check actual achievements and to discover and rectify deviations through appropriate corrective measures.

## (6) Co-ordinating and Communication

- Flow of information, decisions and results in every direction.
- In large organization and in a large complicated project - co-ordinate the work of various departments and sections.
- Requires efficient system of communication
- Regular meetings of department/section heads with top management