UNIT – IV

PROJECT PLANNING, SCHEDULING, MONITORING AND IMPLIMENTATION.

4.1 Introduction to project planning:

1) Project planning is a blueprint towards achieving goals or ends.

2) It is the skeleton with a bundle of activities or a guided activity.

3) It is a plan for the allocation of resources and efforts for the commencement of the project with immense planning.

4) It is also defined as a hope to do something with respect to an issue.

5) It is the final form of written documents which guides us to what steps to be taken when.

6) If project is meticulously planned, then the project can be easily executed.

4.2 Nature of project planning:

1) A project cannot be conceived in a linear manner as it involves few activities, resources, constraints, and interrelationships.

2) It can be visualized easily by human mind and planned informally.

3) When a project crosses a certain threshold level, with lots of complexities, big size, then informal planning should be substituted by formal planning.

4) It is an open system, oriented, planned, change attempted which includes many parameters and dimensions.

5) Project needs formal planning than for normal operations .

6) Pre-defined and outlined in detail plan of action helps the managers to manage their tasks more effectively and efficiently.

7) Because of the limited availability and ever-expanding human needs, planning for the optimum utilization of available resources becomes pre-requisite for rapid economic development of a country.

8) Project planning lists out the priorities and promising projects with various alternatives available.

9) Planning also helps in making investments decisions.

4.3 Need for project planning:

1) One of the objectives of project planning is complete definition of all work requested so that it can be readily identifiable to each project participant.

2) Besides that, there are four basic reasons for project planning:

- To eliminate or reduce uncertainty.
- To improve efficiency of the operation.
- To obtain a better understanding of the objectives.
- To provide a basis for monitoring and controlling work.

4.4 Functions of project planning:

1) It should provide a basis for organizing the work on the project and allocating responsibilities to individuals.

2) It is a means of communication and co-ordination between all those involved in the project.

3) It induces the people to look ahead.

4) It instills a sense of urgency and time consciousness.

5) It establishes the basis for monitoring and controlling.

The project manager must structure the work into small elements that are:

Manageable, independent, integrate and also measurable in terms of progress.

Project planning must be systematic and flexible enough to handle unique activities, disciplined through reviews and controls and capable of accepting multi-functional inputs.

4.5 Steps in project planning:

The three main steps involved in project planning decisions are:

1) An individual becomes aware that there are alternative ways of action which are relevant to the decision to be made.

2) He must define each of the alternatives involving a determination of consequences or impact of each of the proposed alternatives.
3) The individual must exercise a choice between the alternative that is he has to decide with maximum input, feedback, and participation of superiors as well as sub-ordinates.

Planning is a systematic attempt to achieve a set of goals within the specified time limit under the constraints of available resources involving the least sacrifice.

Planning involves two different methodologies:

a) Planning by incentive.
b) Planning by direction.

Planning by incentive:

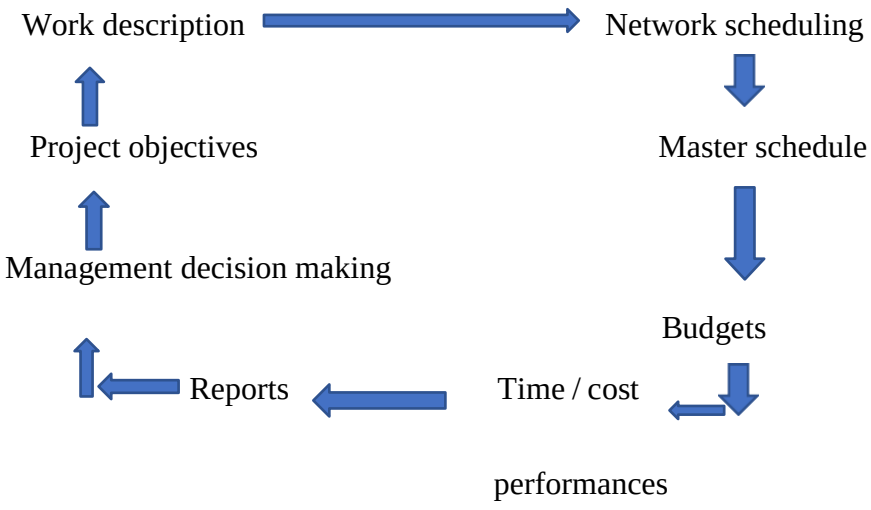
It depends on controlling of economic tools to push economic resources towards the attainment of set goals within the specified period.

Planning by direction:

More emphasis is given on the direct participation of the central planning authority in the economic activities to attain the set goal within the estimated time limit.

4.6 Project planning structure:

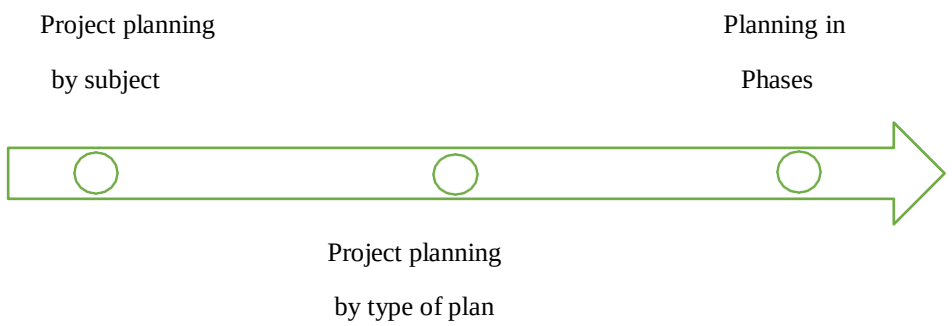
A well-structured project planning helps to establish an effective monitoring and control system. The various activities involved is given in the following chart as project planning structure.



Planning and de-centralizing:

The three main ways in which project planning can be de-centralized into manageable divisions.

Project Planning Decentralization



Planning by subject:

It is simplest way of dividing the powers of planning. The planner takes decision on related operation and planning by subject. He plans, decides and directs the part of plan. He is the soul in charge of the plan from beginning to final completion.

Planning to type of plan:

It broadly defines the premises and assumptions leaving the detailing to be done by the persons at the grass root level of planning. Such cases involve decisions which are routine and involves a lower degree of professional and financial risk.

Planning in phases:

These are designed to several individuals who participate at the formulation stage. The level of people involved is directly related to the phase and the degree of risk involved.

Areas of project planning:

Comprehensive project planning covers the following: Planning the project work: The activities relating to the project must be spelt out in detail. They should be properly scheduled and sequenced.

Planning the manpower and organizations:

The manpower required for the project must be estimated and the responsibility for carrying out the project work must be allocated.

Planning the money:

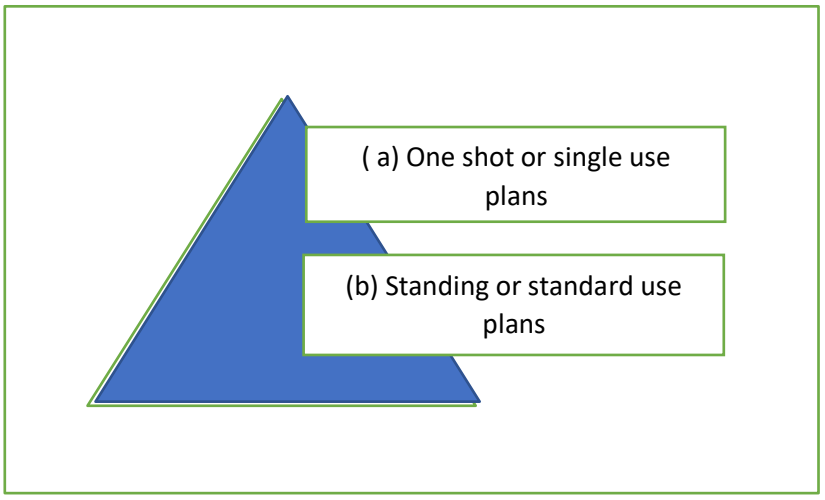
The expenditure of money in time-phased manner must be budgeted.

Planning the information system:

The information required for monitoring the project must be defined.

Types of Project Plan:

The routine planning is done by types of planning decisions as follows:



Single use plans:

It includes programmed schedules and special ways of operating under circumstances. Single plans are meant as objectives which centrally focuses on the desired results. It can be known as short term plans to deal with the specific problem for specific place with prescribed time limit.

Standing plans:

These include plans which include policies, standard methods and standard operation, procedures. They are designed to deal with recurring problems. It may be treated as standard document to be used in different plans to deal with a set of problem.

4.7 Project Objective and Policies:

Often the focus of project planning is on questions like who does what and when before operational planning is done, the objectives and policies guiding the project planning exercise must be clearly expressed and easily understood.

If the project team lacks a clear goal even excellence skills and the best equipment will not enable the team to do a good job. Well defined objectives and policies serve as the framework for the decisions to be made by the project manager. Throughout the life of the project, he must seek a compromise between the conflicting goals of technical performance, cost standard and time target. Very clean and clear understanding of the priorities of management will enable the project manager to take expeditious actions.

An effective project goal has the following characteristics, captured in the term SMART, an acronym for the aspects of a goal commitment. These characteristics of the project goal are Specific, Measurable, Agreed upon, Realistic and Time framed.

The objectives of a project maybe:

- ❖ Technical objectives
- ❖ Performance objectives
- ❖ Time and cost goals

Policies:

Policies are the general guide for decision making on individual actions. Some of the policies of the project are:

- Extent of work given to outside contractors.
- Number of contracts to be employed.
- Terms of the contract, etc.

Project policies must be formulated based on the following principles:

- ❖ It must be based upon the known principles in the operating areas.
- ❖ It should be complimentary for coordination.
- ❖ It should be definite, understandable, and preferably in writing.
- ❖ It should be flexible and stable.
- ❖ It should be reasonably comprehensive in scope.

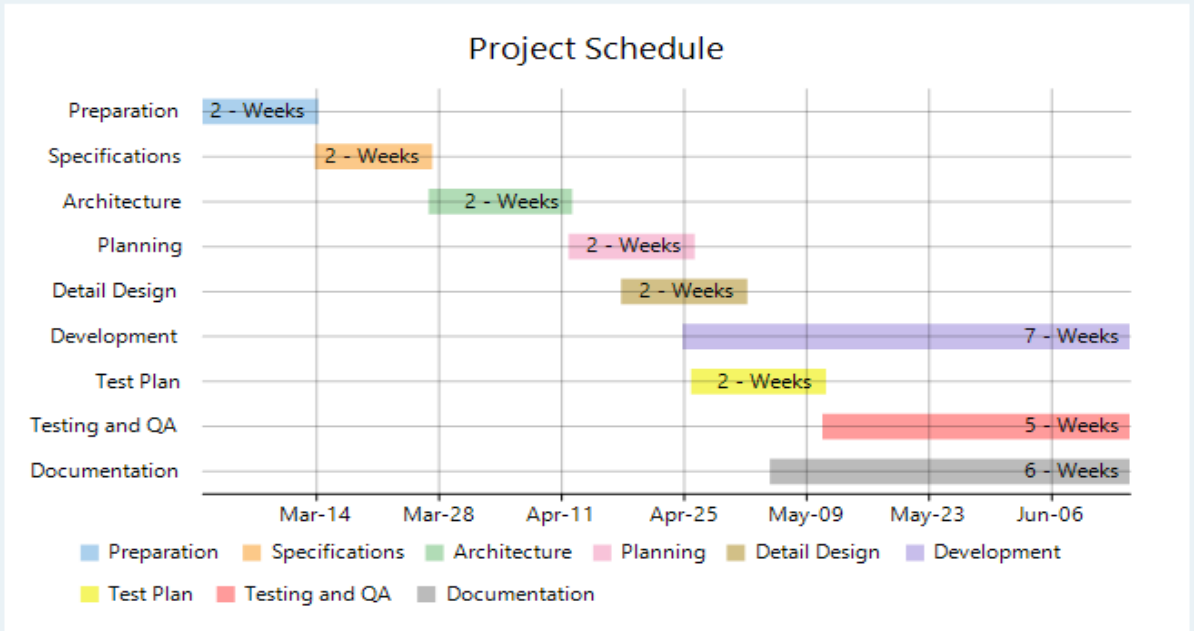
4.8 Tools of Project Planning:

Two different tolls are available for drawing the project plan in a formal way categorised as traditional tools and network analysis.

Gantt Charts

It is the oldest formal planning tool designed by Henry Gantt in 1993. Under this, the activities of project are broken down into a series of well-defined jobs of short duration whose and cost and time can be estimated. It is a pictorial device in which the activities or jobs are represented by horizontal bars in the time access. The length of the bar indicates the estimated time for the job. The left-hand end of the bar shows the beginning time, the right hand shows the ending time. The manpower required for the activity is shown by the number on the bar.

GANTT CHART



Merits and Demerits of Gantt charts:

MERITS:

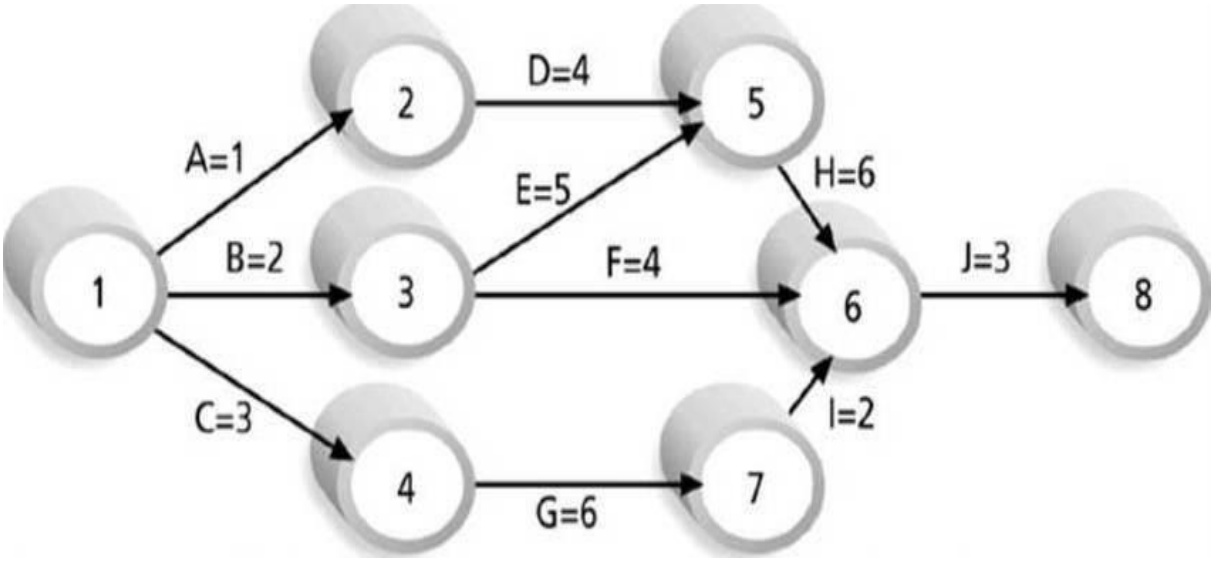
1. It is simple to understand.
2. It can be used to show progress.
3. It can be used for manpower planning.

Demerits:

1. It cannot show inter-relationship among activities on large complete projects.
2. There may be physical limit to the size of the bar chart.
3. It cannot easily cope with frequent changes or updating.

Network techniques:

These are more sophisticated than the traditional bar chart. In these techniques, the activities, events, and their inter-relationships are represented by a network diagram which is also called an arrow diagram. The following diagram shows an illustrative network diagram.



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A network is drawn in which the lines between the nodes represent the jobs, the nodes being numbered to identify the jobs.

The advantages of network techniques are:

1. They can effectively handle inter-relationships among project activities.

2. They identify the activities which are critical to them. Completion of the project on time indicate the float (spare time) for other activities.
3. They can handle very large and complex projects.
4. They can be easily computerised and updated.

They also suffer from several drawbacks such as

a) They are not easily understood by the project personnel.
b) They do not define an operational schedule which tells who does what and when.

Project Design:

A project is a blueprint for action-oriented activities of an organization/ individuals. Projects reflects the plan for action in its totality.

- Project design defines the individual activities which go into the project and their inter-relationship.
- It defines the flow of events which takes place before a project can start yielding the results for which it has been setup.
- Project design is primarily convened with the development of the detailed work plan of the project with the time schedule.
- It conveniently expresses the inter-relationships between various constituent activities of a project in the form of a network diagram.
- It gives a clear picture of the work elements of the project and paves the way for detailed identification and quantification of the project inputs.

Time Estimate:

1) While designing a project it is essential to fix/set time target for each activities of the project.
2) It also helps to complete the projects as per time schedule through which it can enjoy optimum benefits.
3) Time estimate can be made by making a work breakdown of the project, estimating the time schedules for each work, putting them in proper sequence as per technical or any other logical manner and finally matching their build-up on a time scale with the available resources.
4) The time estimate for completing a project depends not on the work content/sequence but is also influenced by resources and constraints.
5) The basic factors involving in time estimation are work, constraints, resources, and

data available.

6) Three values of time can be obtained for each activity of a project.
    a) Optimistic time (t_o)
    b) Most likely time (t_m)
    c) Pessimistic time (t_p)

Optimistic time: The time required if no hurdles or complications arise.

Most likely time: The time in which the activity is most likely to be completed.

These estimates take into consideration normal circumstances, making allowances for some unforeseen delays.

Pessimistic time: The time required if unusual complications and/or unforeseen difficulties arise.

Conditions of Time Estimate:

1. Time estimate should be obtained by skipping around the network rather than by following a specific path. If ensures are obtained by following one path, there is

   tendency for the person providing estimates to add them mentally and compare them with a previously conceived notion of the time of the total path.
2. The estimates of t_o, t_m, t_p should be defined independently of each other.
3. The time available for completing the project should not influence the estimates of t_o, t_m, t_p.
4. It should be made clear that t_o, t_m, t_p are estimates and not schedule commitments.
5. The estimates of t_o, t_m, t_p should indicate allowances for occurrences which are generally considered as random variables (weather conditions, administrative delays) but not for occurrences that are normally not considered as random variables (flood, war)

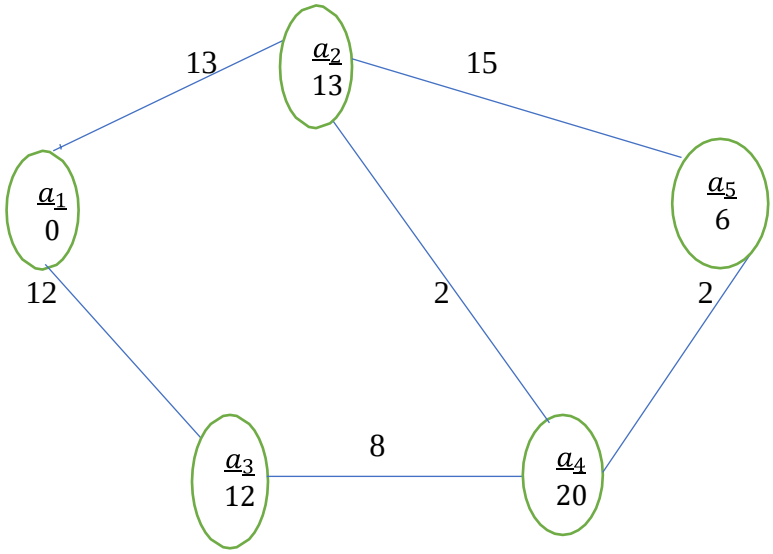
Average Time:

Once the three time estimates for each activity are obtained, the expected value of activity duration is calculated. The expected value, t_e, is usually obtained by the formula:

$$t_e = \frac{t_o + 4t_m + t_p}{6}$$

activity Numerical Description	Time Estimate			$t_e = \frac{t_o + 4t_m + t_p}{6}$
	t_o	t_m	t_p	
(a) 1 - 2	9	12	21	13
(b) 1 - 3	6	12	18	12
(c) 2 - 4	1	1.5	5	2
(d) 3 - 4	4	8.5	10	8
(e) 2 - 5	10	14	24	15
(f) 4 - 5	1	2	3	2

The network diagram with average time estimates is shown in the following figure:



Different Approaches of Time Estimation:

1. Time study approach:

In this approach the time T for completing a work is T= a/P x n
where a = total quantity of work, P = productivity factor, n= normal size of view.
But it is very, difficult to realize the above data.

2. Previous project data:

In this approach data from recently completed projects are used without consideration of a, p and n. Often these data are used for estimating broad work package duration. Their values are also used for the overall project duration.

3. Estimating approach

In this approach experienced project personnel are asked to approach is widely used question project duration. This for estimating time duration a project. Three estimates

optimistic, most pessimistic likely are made in this approach to make up for error in the estimates. A single time, known as expected time *te* is then worked out sing as

$$t_e = \frac{t_o+4t_m+t_p}{6}$$

This approach has been used for calculating the average time as given above.

4.Range Estimates:

These estimates may also be a estimate or even past data. No two time data from past projects for any work will be the same; they can be better expressed by a range.
e.g., vendors quite often get deliveries like 6-8 months or 10-12 months.

5. Estimates from vendors and contractors:

Vendors and contractors are asked to indicate time estimates as they are often asked to quote budgetary cost estimates. These estimates in a competitive situation are supposed to provide a realistic estimate.

6. Allocated a committed time:

Certain activities require a fixed duration likes an incubation period. The duration could be changed, within a limit, to meet the requirements of the project.

In practice, therefore, instead of trying to accurately estimate the duration, a reasonable duration is allocated and commitment obtained from the people who will be held responsible for implementation. When the duration is not acceptable to any one, it may change.

Conclusion

Thus, Project plan is a skeleton which consists of bundle of activities with its future prospects. h helps to allocate the resources, efforts and time in a proper way which increases the efficiency of project performance. Moreover, it helps to exercise control and monitor the project work thereby facilitate the timely completion of project.

4.9 Project Scheduling

It is one of the key components in the project control system. It refers to when it is to be done and how much is to be done. The purpose of scheduling is to obtain commitment, communicate the commitments to concerned project and ensure coordination through self-scheduling is regulating first efforts. 1he helpful to link the summary of activities appearing in the network and review the lapses.

Purpose: The ongoing scheduling and monitoring process enables one to:

1.Successively detail out the schedule to provide physical equivalence with reality

2. Adopt the schedule to the changed realities

3. Provide intervention when stability of the work system is being threatened and revitalise the system.

Monitoring is an action inducing efforts meaning that it would ensure that communication made by various commitments made by agencies are followed by action for seamless execution.

4.10 Time Monitoring Efforts

For monitoring the time aspects of the project, the efforts should be taken.

1. Conduct appreciation programme for the owner.
2. Development of project execution plan and overall project implementation schedule.
3. preparation of special condition of contract for scheduling and monitoring by work package complications.
4. evaluation of bids in relation to scheduling and monitoring.
5. Appearance or review the detailed schedules and progress reports submitted by vendors and contractors.
6. Reviews with owner, consultants, contractors and vendors.
7. Project audit and corporate review.
8. Monthly progress report to the owners
9. Installation and operation of an on-line information system 10.On the job training for on-going scheduling and monitoring to the monitoring agency.

So, schedule control is to ensure adherence to the agreed time schedule for the project. Monitoring and control of project and time. Therefore, becomes essential to ensure adherence to project schedule.

4.11 Bounding Schedules

scheduling of non-critical activities can be done by two schedules.

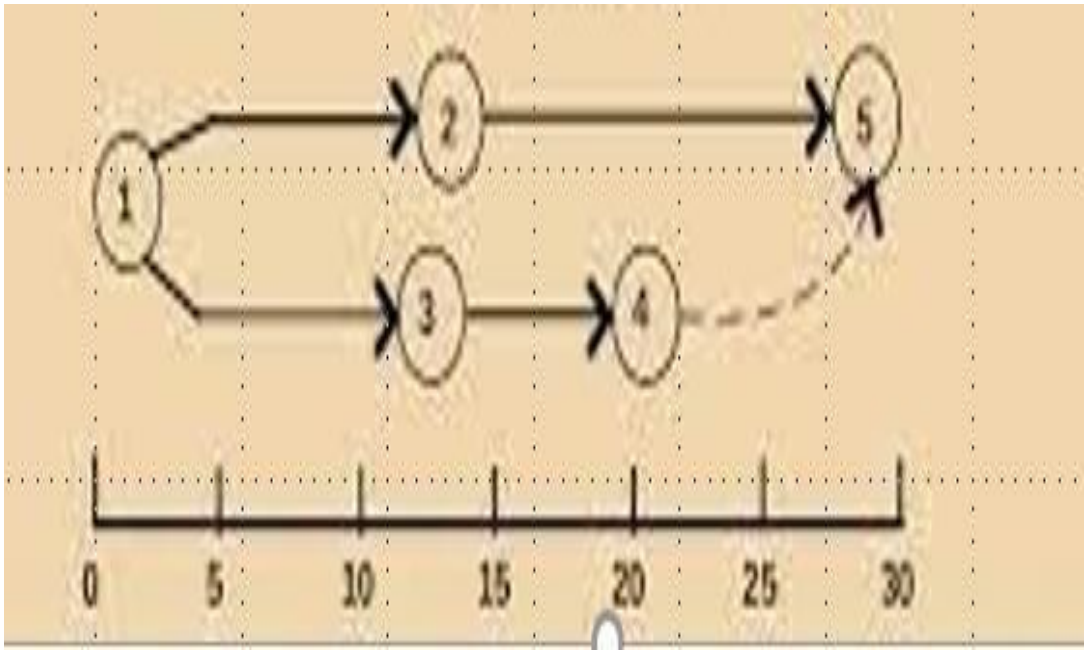
Early start schedule

Late start schedule

Early start schedule refers to the schedule in which all activities start as early as possible.

a) all events occur at their earliest because all activities start at their earliest starting time and finish at their earliest finishing time
b) there may be time lags between the completion of certain activities and the occurrence of events which these activities lead to, and
c) all activities emanating from an event begin at the same time.

The early start schedule: It suggests a cautious attitude towards the project and a desire to the possibility of delay. It provides a greater measure of protection against uncertainties and adverse circumstances. Such a schedule however, calls for an earlier application of resources. A model for early start schedule is given below:



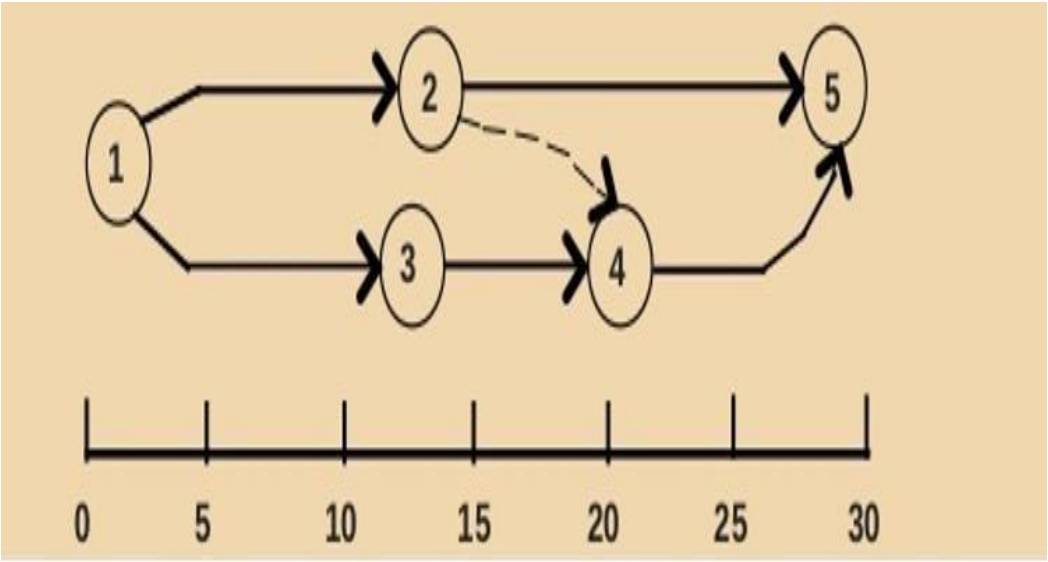
The late start schedule: It refers to the schedule arrived at when all activities are started as late as possible. In this schedule,

I. all events occur at their latest because all activities start at their latest starting time and finish at their latest finishing time.

II. some activities may start after a time lag subsequent to the occurrence of the proceeding events.

III. all activities leading to an event are completed at the same time.

The late start schedule reflects a desire to commit resources as late as late as possible. However, such a schedule provides no elbow room in the wake of adverse developments. Any unanticipated delay results in increased project duration. A model for late start schedule is given below:

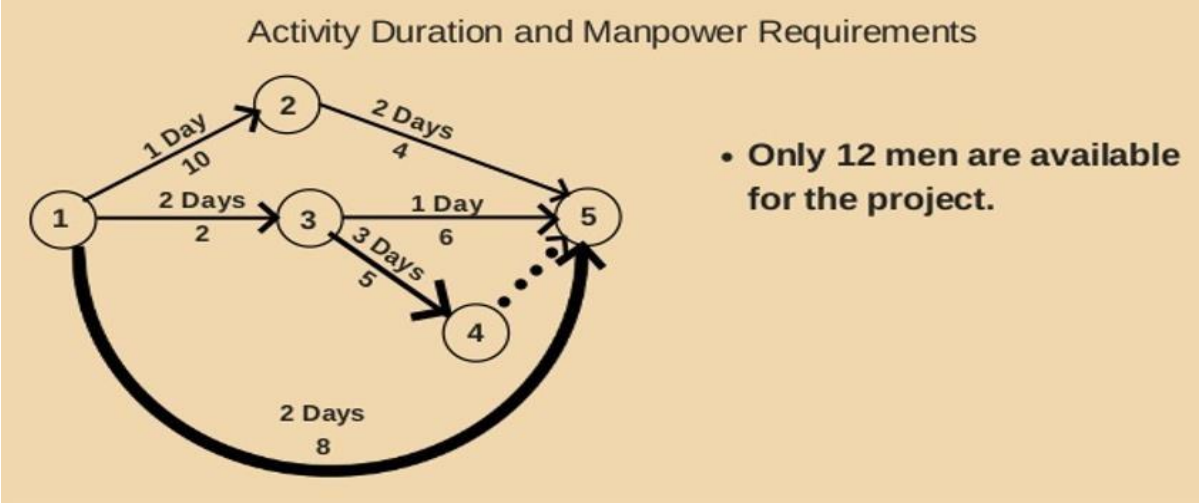


For generating various schedules, the early start schedule, the late start schedule, or any other schedule lying between these two bounds, information was required only regarding network logic and activity duration. This approach to scheduling implicitly assumes that adequate resources are available so that each activity can be scheduled anywhere between its earliest starting time and latest

staring time. In real life situations, however, there may be restrictions on the availability of resources. For example, man-power supply may be limited or funds made available period-wise may be rigidly budgeted. When restrictions exist, various schedules may have to be considered to find out which one is most appropriate in the light of these restrictions. We shall discuss two examples to indicate the broad approach to scheduling in the face of resource constraints.

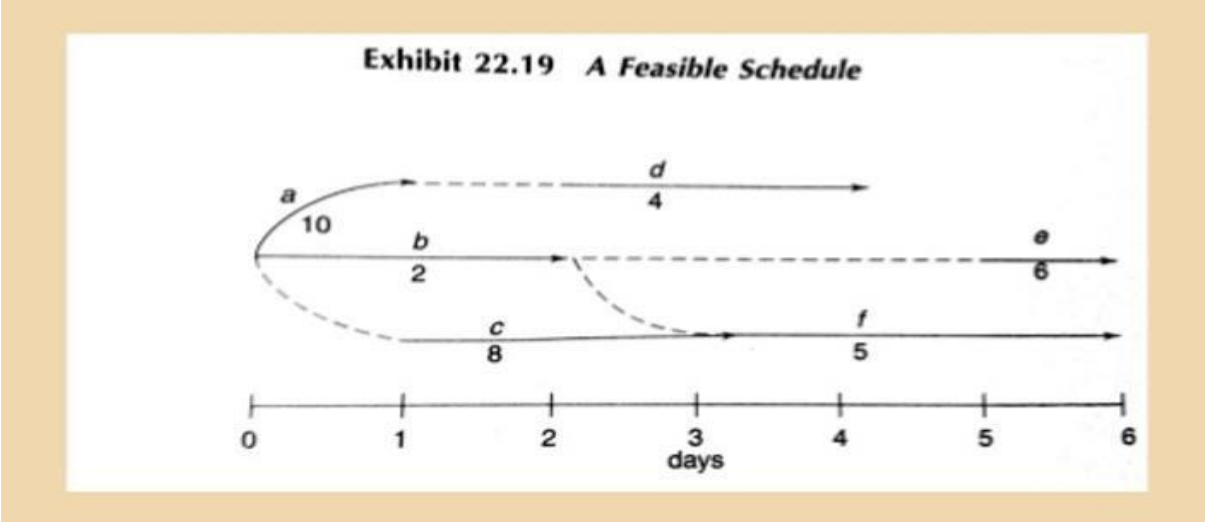
4.12 Scheduling to Match Availability of Manpower

Let us consider a small project for which the network diagram is shown in fig.



In fig. activity duration is shown above the activity arrow and manpower requirement is shown below the activity arrow. Only 12 men are available for the project (a manpower resource constraint).

The early start schedule of this project is shown as a graph on the horizontal time scale in fig.



Looking at the manpower requirement for the early start schedule we find it is as follows: 20 for the first day, 14 for the second day, and 5 for the fifth day. Obviously, this schedule is unacceptable in view of the manpower constraint. So, we explore the possibility of shifting activities. Our efforts at shifting activities, keeping the project duration at five days soon reveals that no schedule is feasible with only 12 men. So, we extend the duration of the project by one day and try various schedules to see whether we can find a feasible schedule. A little juggling of activities shows that a schedule like the one shown in fig. is feasible this is the best we can do.

4.13 Scheduling to Match Release of Funds

The cost estimates for various activities of our illustrative project is given in the table. For our discussion here weeks have been changed to months.

Activity	Duration	Cost per Month	Cost in Months
(1-2)	13	200000	260000
(1-3)	12	500000	600000
(2_4)	2	1000000	200000
(3-4)	8	250000	200000
(2-5)	15	100000	1500000
(4-5)	2	750000	1500000

Total	15600000

The government has decided to release 1,56,00,000 required for the project in the following manner.

69,00,000 in the first year 68,00,000 in the second year, and 19,00,000 in the third year. it has also stipulated that the unspent amount would lapse and hence cannot be carried forward.

Before we develop the project schedule a preliminary question may be asked: it is possible prima facie to schedule this project without extending its duration beyond 28 months, which is the minimum time required given the network logic and activity duration? To answer this question let us look at the funds requirement for the early start schedule and late schedule. This is shown in Fig.

From Fig. we find that

1. The rate of expenditure is relatively higher for the earlier stages in the early start schedule and is relatively higher for the later stages in the late start schedule.
2. A rate of spending greater than that of the early start schedule is not possible (this is because in the early start schedule all activities start as early as possible). Any release of funds above the early start schedule requirement curve is beyond the capacity of the project to spend.
3. The rate of spending corresponding to the late start schedule is the absolute minimum necessary to complete the project on time. If the rate of spending is less, than that corresponding to the late start schedule the project duration will have to be necessarily extended.
4. A pattern of funds release lying between the two bounds, early start schedule requirement and late start schedule requirements, prima facie suggests that a schedule can be worked out without extending project duration.

Let us now look at the cumulative funds release pattern for our illustrative project. This lies between the early start schedule requirement as late start schedule requirement. So, prima facie it suggests that a feasible schedule without extending the project duration can be developed. Let proceed further and consider scheduling year by year. The activities thus begin in year I according to the early at schedule are (1-2) and (1-3). I both these activities are commenced as early as possible, the fund requirement for year I would be 84 lakhs. Since this amount exceeds? 69 lakhs, the amount to be released in year 1, the expenditure in year I has to be reduced by? 15 lakhs. For this we consider the possibility of shifting activities to subsequent periods.

Looking at activities (1-2) and (1-3) we find that (1-2) is on the critical path, so there is no flexibility available with respect to it. Activity (1-3), however, can be shifted as it is not on the critical path. Since activity (1-3) requires 5 lakhs per month it has to be shifted by three months so that the amount spent in year 1 in equal to the amount released in year 1. Since there is free float of six months for activity (1-3), we shift it by three months.

We now go to years 2. The effects of shifting activity (1-3) by three months are as follows: (i) the funds requirement for year 2 on account of activity (1-3) increases by 15 lakhs over and above what it is for the early start schedule, (ii) The earliest starting time for activity (3-4) moves to 15 months from 12 months and the earliest finishing time moves to 23 months from 20 months. Since this shift occurs within year 2, there is no change in funds requirement on account of activity (3-4). (iii) The earliest starting time for activity (4-5) moves to 23 months from 20 months and the earliest finishing time for activity (4-5) moves to 25 months from 23 months. This decreases the funds requirement for year 2 are only 68 lakhs. So, we consider the possibility of shifting some activities to year 3. We find that by shifting activity (4-5) to year 3 the expenditure in year 2 can be reduced to 68 lakhs, the budget of the year. As a result of this shifting the expenditure for year 3 (first four months of it) equals the budgeted funds release for year 3. The schedule arrived at finally is shown in Fig.

4.14 Problems in Scheduling Real-life Projects

In the above discussion we have considered simple examples comprising few activities and one constraint, to indicate the broad approach. In real life projects the activities run into hundreds and there may be several constraints. The problem of scheduling in such cases tends to become very complex. for solving such problems, the technique of linear programming can be used. However, when a problem has numerous activities, say more than 100, the technique of linear programming becomes computationally unwisely and inordinately expensive, even with the aid of the fastest computers available.

In view of the practical difficulties in using linear programming for solving large-scale scheduling problems, heuristic programs have been developed.

Project Monitoring and Implementation

4.15 Introduction:

Monitoring is an integral part of every project, from start to finish.
A project is a series of activities (investments) that aim at solving particular problems within a given time frame and in a particular location. The investments include time, money, human and material resources. Before achieving the objectives, a project goes through several stages. Monitoring should take place at and be integrated into all stages of the project cycle.

The three basic stages include:

- Project planning (situation analysis, problem identification, definition of the goal formulating strategies, designing a work plan, and budgeting);
- Project implementation (mobilisation, utilisation and control of resources and project operation); and
- Project evaluation.

Monitoring should be executed by all individuals and institutions which have and interest (stake holders) in the project. To efficiently implement a project, the people planning and implementing it should plan for all the interrelated stages from the beginning.

In the "Handbook for Mobilisers," we said the key questions of planning and management were (1) What do we want? (2) What do we have? (3) How do we use what we have to get what we want? And (4) What will happen when we do? They can be modified, using "where," instead of "what" while the principles are the same;
The questions become:
Where we are?
Where do we want to go?
How do we get there? And
What happens as we do?

4.16 Situation Analysis and Problem Definition

This asks the question, "Where are we?" (What do we have?).

Situation analysis is a process through which the general characteristics and problems of community are identified. It involves the identification and definition of the characteristics and problems specific to particular categories of people in the community. These could be people with disabilities, women, youth, peasants, traders and artisans.

Situation analysis is done through collecting information necessary to understand the community as a whole and individuals within the community. Information should be collected on what happened in the past, what is currently happen in the future, based on the community's experiences.

Information necessary to understand the community includes, among others:

- Population characteristics (e.g. sex, age, tribe, religion and family sizes):
- Political and administrative structures (e.g., community committees and local councils):
- Economic activities (including agriculture, trade and fishing):
- Cultural traditions (e.g. inheritance and the clan system). Transitions (e.g, marriages, rites), and rites of passage (e.g., circumcision)
- On-going projects like those of sub-county, district, Central Government, non-Government organisations (NGO's), and community-based organizations (CB0s);
- Socio-economic infrastructure or communal roads); and facilities, (e.g, schools, health units and
- Community organisations (e.g., savings and credit groups, women and burial groups, self-help groups and burial groups), their functions and activities.

Information for Situation analysis and problem definition should be collected with the involvement of the community members using several techniques. This ensures valid, reliable and comprehensive information about the community and its problems.

Some of the following techniques could be used:

- Document's review;
- Surveys;

- Discussions with individuals, specific groups and the community as a whole;
- Interviews;
- Observations;
- Listening to people;
- Brainstorming;
- Informal conversations;
- Making an inventory of community social resources, services and opportunities;
- Transect walks, maps; and
- Problem tree.

Situation analysis is very important before any attempts to solve the problem because:

- It provides an opportunity to understand the dynamics of the community.
- it helps to clarify social, economic, cultural and political conditions;
- it provides an initial opportunity for people's participation in all project activities;
- it enables the definition of community problems and solutions; and
- it provides information needed to determine objectives, plan and implement.

situation analysis should be continuous, in order to provide additional information during project implementation, monitoring and re-planning. Situation analysis and problem identification should be monitored to ensure that correct and up dated information is always available about the community and its problems.

Since monitoring should be integrated into all aspects or phase of the process, let us go through each phase and look at the monitoring concerns associated with each.

4.17 Setting Goals and Objectives

Goal setting asks the question. "Where do we want to go?" (What do we want?).

Before any attempts to implement a project. the planners, implementers and beneficiaries should set up goals and objectives. See Brainstorm for a participatory method todo this.

A goal is a general statement of what should be done to solve a problem. It defines broadly what

is expected out a project. A goal emerges from the problem that needs to be addressed and signals the final destination of a project. Objectives are finite sub-set of a goal and should be specific order to be achievable.

The objectives should be "SMART." They should be:

Specific: clear about what, where, when, and how the situation will be changed.

Measurable: able to quantify the targets and benefits;

Achievable: able to attain the objectives

(knowing the resources and capacities at the disposal of the community)

Realistic: able to obtain the level of change reflected in the objective; and

Time bound: stating the time period in which they will each be accomplished.

To achieve the objectives of a project, it is essential to assess the resources available within the community and those that can be accessed from external sources. See Revealing Hidden Resources

The planners, implementers and community members should also identify the constraints they may face in executing the project and how they can overcome them. Based on the extent of the constraints and positive forces, the implementers may decide to continue with the projector to drop it.

The goals and objectives provide the basis for monitoring and evaluating a project. They are the yardsticks upon which project success or failure is measured.

- Realistic - Able to attain the level of change reflected in the objective.
- Time bound - Stating the time in which they can be achieved.

To achieve the objectives of a project, the resources available within the community should be assessed and those that can be accessed from the external sources.

The planner, implementers and community members should also identify the constraints they may face while executing the project and how they can be solved. Depending upon the extent of constraints and positive forces, the implementer have to decide to continue with the project or to drop it.

Goals and objectives provide the basis for monitoring and evaluating a project and project success can be measured by these measuring rods (goals and objectives).

4.18 Generating Structures and Strategies :

This will ask the question as "How do we get there ?"

The planners and implementers should decide on how they will going to implement a project and which is the strategy to be followed. Agreeing on the strategy involves the determination of all input items which are needed to carry the project, defining the groups or individuals and their particular roles they have to play in a project. These groups and individuals which are playing the roles are called Actors.

Therefore, generating the structures and strategies involves :

- Discussing and agreeing on the activities are to be undertaken during implementation.

- Defining and deciding the different actors inside and outside the community and their roles.
- Defining and distributing the costs and materials necessary to implement the project.

The implementer should discuss and agree with all the actors about how the project should be implemented. This is called the designing of work plan. The work plan involves, the description of the necessary activities in all stages with the timing.

To draw the work plan, the implementer should :

- List out all the tasks required to implement the project.
- Put the tasks in a proper order to implement.
- Allocate the responsibilities to the actors and
- Set the timing for each activity.

The work plan will helps to :

- Finish the project well in time.
- Do the right things in a right order.
- Identify the person who will be responsible for particular activity and
- Decide when to start the project implementation.

The implementers and planners have to agree on monitoring indicators. These indicators are the criteria for measuring the achievement of project activities and objectives.

The monitoring indicators are :

- **Input indicators :** Describes about what goes on in the project (ex : number of blocks brought in sight and amount of money spent).

- **Output indicators :** Describes the project activities (ex : number of rooms built).
- **Outcome indicators :** Describe the product of the activity (ex : number of students attending the school).
- **Impact indicators :** Measures the change in the conditions of the community.

Therefore, generating the structure and strategies will helps in project monitoring because they specify that, what should be done during the project implementation. The planning must indicate that the, what should be monitored, who should be monitored and how the monitoring should be carried out.

4.19 Implementation :

This will asks the question as "what happens as we do ?"

In this implementation stage all the planned activities are put into action. Before implementing the project, the implementers should identify their strength, weakness (internal forces), opportunities and threats (external forces).

The strengths and opportunities are the positive forces which are to be exploited to implement the project effectively and efficiently. Weakness and threats are negative forces which are to be minimised to implement the project successfully.

Monitoring continuously monitors the implementation process so that the project is implemented as per the schedule.

If any activity deviating from its objective, an effective action is taken to solve the problem so that the activity should follow the desired path.

Monitoring is also important to ensure that the activities are implemented as per the plan, whch helps in measuring how well they are achieving the targets.

4.20 What is Project Evaluation ? :

Project evaluation is a step-by-step process of collecting, recording and organising the information about the project results, including short-term outputs, immediate and long term outputs.

- Short-term outputs are immediate results of activities or project deliverables.
- Long-term outputs are changes in behaviour, practice or policy resulting from the project.

Reasons for Conducting the Evaluation :

i) Response to demands for accountability.

ii) Demonstration of effective, efficient and equitable use of financial and other resources.

iii) Recognition of actual changes and progress made.

iv) Identification of success factors.

v) Identification of need for improvement

vi) When the expected outcomes are unrealistic.

vii) Validation for project staff and partners that the desired outcomes are being achieved.

4.21 Why the Project Evaluation is Important ? :

Project evaluation is very important because its results are very helpful in providing answers to the following questions :

1. What progress has been made ?
2. Where is the desired outcome is achieved ? Why ?
3. Are there ways that project activities can be refined to achieve the better outcomes ?
4. Do the project results justify the project inputs ?

[Refer the reasons for conducting the evaluation in the last topic].

4.22 What are the Challenges in Monitoring and Evaluation ? :

Following are the challenges in monitoring and evaluation :

1. Getting the commitment to do it.
2. Establishing the base lines at the beginning of the project.
3. Identification of realistic quantitative and qualitative indicators.
4. Determining the time to do it and sticking on to it.
5. Getting the feedback from the stakeholders.
6. Reporting back to the stakeholders.

EXERCISES

1. What is project planning ?
2. Explain the nature of project planning.
3. What are needs or reasons of project planning ?
4. List the functions of project planning.
5. What are the functions of project planning ?
6. What are the steps in project planning ?
7. Explain the steps in project planning.
8. Explain the project planning methodologies.
9. What are the key elements involved in project structure
10. Explain the decentralisation of project planning.
11. What are the different areas of project planning ?
12. Explain the different project plans.
13. Explain the project objectives.
14. What are the characteristics of project goals or objectiv
15. Explain the project policies.
16. What are the principles for formation of project policie
17. List the tools for project planning.
18. Explain Gantt chart used for project planning.
19. Explain Network techniques used for project planning.
20. What are the merits and demerits of Gantt chart ?
21. What are the advantages and disadvantages of Netw techniques ?
22. Explain the project design used for project planning.