**CHAPTER ONE : INTRODUCTION TO PROJECT PLANNING**

* 1. **THE PROJECT CONCEPT**

**What is a Project?**

There are many definitions of a project. To mention some:

Turner (1993), defines a project as “an endeavor in which human, (or machine), material, and financial resources are organized in a novel way to undertake a unique scope of work, of a given specification or standard, within constraints of cost and time, so as to deliver beneficial change defined by quantitative and qualitative objectives”.

Gittinger (1982) defines a ‘project’ as... an investment activity upon which resources are expended to create capital assets that will produce benefits over an extended period of time and which logically lends itself to planning, financing, and implementing as a Unit.The smallest operational element prepared and implemented as a separate entity in a national plan or program. Moreover, it is ‘The whole complex of activities for which money will be spent in expectation of returns’.

A project is also defined as *“a temporary endeavor undertaken to create or provide a unique product or service.* ***Temporary*** *means that every project has a defined end.* ***Unique*** *implies that the product or service is* ***different*** *in some distinguishing way from all similar products or services”*.

Potts (2002) on the other hand suggested that the easiest way to define a project is to outline the ***common characteristics***. The characteristics include:

**1.** A project involves the investment of **scarce resources** in the **expectation of future benefits;**

**2. There are measurable Objectives** of a project. Projects have specific of benefits that can be identified, quantified and valued, either socially or monetarily/commercially/. Related to the specificity of objectives, is the fact that projects have **specific beneficiaries** or **clientele group,** which needs to be specifically spelt out during project planning studies.

**3.** A project is the **smallest operational element unit**. A project can be planned, financed and implemented as a unit. Often projects are the subject of special financial arrangements and have their own management. Despite the fact that a project constitutes many activities and tasks, it is defined as the smallest operational unit. The major reasons why a project is defined as the smallest operational unit are the fact that a project is bounded by different factors. The boundaries of projects make them distinguishable from each other.

• Projects are **conceptually bounded.** The problem and specific objective or needs that justify the project involves conceptual delimitations.

• **Projects are geographically bounded.** Projects exist in space and we say that projects are geographically/location bounded.

• Projects are **organizationally bounded.** Projects require the establishment of a special organization or the crossing of traditional organizational boundaries. I.e. there should be certain organizational unit responsible for project implementation.

• Projects are **time bounded**. One factor that makes projects bounded is the time/life cycle/ of a project. Projects have specific lifetime, with a specific start and end time in which a clearly defined set of objectives are expected to be achieved. It is a unique, **one-time** investment scheme.

**4. Uncertainty and risks** is inherent in any project. Achieving project objectives cannot be predicted in advance with accuracy. The factors that make project risk are:

* Significant and multiple types of **scarce resources** committed today expecting outcome in the future;
* Benefits are expected to be generated in the **future**, which is less predictable;
* Capital investments are **irreversible**, i.e. the assumption of perfect exit assumption of the perfect competition model is refuted.

**5.** It has a scope that can be categorized into **definable tasks**. Projects usually have well defined sequence of investment and production activities

**6.** It may require the use of **multiple resources**.

A project can alternatively be defined as a ***group of tasks*** performed in a ***definable time period*** in order to meet a ***specific set of objectives***.

There are different types of projects: public, private, private individual, small, large, agricultural, industrial, etc

***Uniqueness of Projects***

In general every project is unique in the sense that there are factors that distinguish projects from others. Some of the main factors which bring about differences in the nature of projects and that determine the breadth and depth of project studies include:

* size/scale/, small-, medium- and large- scales of projects
* markets; projects catering to regional, national or international markets
* Technologies, heavy, light, mature or newly evolving technology, factor intensity, etc.
* Economic and vocational context: Rural and urban projects, projects in LDCs and DCs
* the macro economic situation at which the particular project is being considered
* the level of competition, high or low competition, local or global competition
* ownership (private and public projects)

**Why project planning?**

The need for project planning, preparation and study emanates from:

**I**. The **quest for change**: dissatisfaction with the present and/or pressure or incentive for different tomorrow;

**II. Change involves investment/commitment** of resources to realize the objectives. Investment may be defined as a long-term commitment of economic resources made with the objective of producing and obtaining net gains in the future. The main aspect of such commitment is the transformation of liquidity (the investor’s own and borrowed funds) into productive assets, and the generation of liquidity again during the use of these assets. Yet once the resources are committed, there is no way of recovering it apart from conducting profitable operation. That is exit costs are not zero, as it is assumed in the perfect competition model.

**III**. The **scarcity** of investible resources and unlimited development/business needs;

**IV.** Investment is all about resource commitment into the **future**, which is less predictable;

**V.** Since investment schemes involve substantial resources commitment and are invested for the future, there is an inherent high **risk** involved.

**VI**. The costs and benefits are **temporally spread**

**VII**. In such a situation **decision-making** is not simple and perfect

**Limitations in project planning**

***Measurement*:** measuring costs and benefits is, sometimes, difficult. Some costs and benefits are easily quantifiable but others do not lend theme selves to quantification.

***Uncertainty*:** investment decisions involve direct outlays of resources in future expectation of returns. Human beings have les potential to forecast the future and there is always there is some degree of uncertainty.

**PLAN, PROJECT AND PROGRAM**

**Projects and Plans:**

**Planning** is a means to an end. It's a guide to achieving certain objectives in an optimum manner by means of an orderly sequencing of activities.

It is also a form of decision making in using scare resources in selective and economical ways to achieve a pre-determined objectives or goals.

**Planning is necessary because**:

* it helps to make necessary arrangements in advance of possible challenge
* it helps an organization to think ahead and anticipate future events
* it gives clear picture of future events to measure and control actual activities
* it helps to identify operational problems of past performance and future corrections

**Projects and Program:**

Programs have broadly expressed development objectives. While projects are the building blocks of programs and are usually of shorter duration. A project is a means by which national, regional local, etc plans are made operational. This means the plan has to be elaborated into "package of action".

The package of action can be divided into two broad categories. These are:

1. Program: which is the first step in plan elaboration and
2. Project: the second step in plan elaboration.

Program, which is a bigger package of action, is composed of a number of projects aiming at attaining one or more related objectives of plan. Project on the other hand achieves goals which lead to the accomplishment of specific objectives within program.

|  |  |  |
| --- | --- | --- |
|  | Project | Program |
| Difference | * It is specific in objectives * Has specific areal/geographic unit * Has clearly determined and allocated fund * Has specific life | * Has got general objectives * May not have specific area * May not have specific target group * May not have clear and detailed financial allocation * May not have specific time of ending |
| Similarities | * Has purpose/objectives * Require input (financial, manpower, material) * Generate output (goods or services) * Operate over space and time | |

**THE PROJECT CYCLE**

**What is project cycle?**

* It is Sequence of events, which a project follows.
* It is also the process that the project advances from infancy to maturity.
* Project planning proceeds from inception to implementation.

There are a number of models of the project cycle. One of the most known models of project is developed by Mr. W.C. Baum of the world Bank has coined the term "project cycle" in 1970, and his model of project cycle refer Baum's model of project cycle.

However it is naïve to think that a project cycle as a successive stages overtime. There is in fact, much feedback between the project cycle stages, and sometimes, some stages have to be undertaken simultaneously. It is preferable, therefore, to think of the project cycle in the form a computer program, which describes the process more accurately. The separate stages of project planning are:

* Identification
* Preparation
* Appraisal
* Implementation and
* Evaluation

**Project Identification**

Projects identification amounts to finding projects, which could contribute toward achieving, specified development objectives. Or the first stage in project cycle is to identify an idea, which enable to launch a project. The question at this stage is where do project ideas come from?

### Sources of project ideas

We can distinguish two levels where projects ideas are born: the macro level and the micro level.

At the macro level project idea comes from:

* National, sectoral or regional plans and strategies supplemented by special studies often called opportunity studies, conducted with the explicit aim of translating national and sectoral programmes into specific projects.
* Constraints in the development process due to shortage of essential infrastructure facilities, problems in the balance of payments, etc
* A government's decision to correct social and regional inequalities or to satisfy basic needs of the people through development projects.
* Unusual events such as drought, floods, earthquake, etc
* A possible external threat that necessitate projects aiming at achieving, for example, self sufficiency in basic materials, energy, transportation etc.
* Multi or bilateral agreement

At the micro level, project idea emanate from:

* The identification of unsatisfied demand or need
* The existence of unused or underutilized natural or human resources and the perception of opportunities for their efficient use
* The initiative of private or public enterprise in response to incentives provided by the government
* The necessity to complement or expand investment previously undertaken: and
* The desire of local groups or organization to enhance their economic independence and improve their welfare.

Once to some project ideas have been put forward, the first step is to select one or more of them as potentially viable. This calls for a quick preliminary screening by experienced professional who could also modify some of the proposal. Following the preliminary screening, promising project options should be investigated in a systematic manner. This requires the preparation of brief reports that clearly indicates in sufficient and detail those project versions that are promising and suggests those projects options that should be eliminated. Reports of this type are often called pre-feasibility or pre investment studies.

### Content of the pre-feasibility study

The pre-feasibility study should briefly discuss

* The objectives of the project
* The nature and size of the demands for the output or the needs that it would satisfy, together with the foreseen beneficiary groups
* The availability of the most important materials and human inputs
* Basic alternative technologies available and their merits and weakness
* Approximate investments and operation costs as hell as expected revenue
* Rough estimate of financial and economic return
* Any major factors that is likely to have an important effect on the project

**Project Preparation**

If the pre-feasibility study indicates that the projects are, prima facie, promising and further work is justified, the project enter the stage of preparation.

The project is now being seriously considered as a definite investment action and detailed planning of the idea can begin project preparation (sometimes called project formulation) covers the establishment of technical, economical and financial feasibility. Decisions have to be made on the scope of the project, location, and site etc. Complete technical specifications of distinct proposals accompanied by full details of financial and economic costs and benefits are the outcomes of the project preparation stage. The project now exists as a set tangible proposals.

Project preparation is probably the most important stage in project planning. Crucial choices relating to the structure of the project are made at this stage and some of them are virtually irreversible. Crucial choices at the stage of preparation should be made properly by employing the right criteria.

**Project Appraisal**

Project appraisal can be defined as second look at a project report by a person or an institution that is in no way involved in its preparation. It helps in taking an entirely independent view of the project. Appraisal is the comprehensive and systematic assessment of all aspects of the proposed projects.

Appraisal highlights wide area in the project with the ultimate objective of strengthening them adequately so as to ensure final success of the project. The main objective of the appraisal is to improve and renovate the project with the cooperation of the promoter (financing agencies). It's in this stage that the bank will judge whether the project is acceptable or unacceptable.

Appraisals should cover at least seven aspects of a project, each of which must have been `

1. Technical: does the proposed project work in the way suggested?
2. Financial: have the financial requirement of the project been properly calculated, their sources identified and reasonable plans made for their repayment? Where this is necessary?
3. Commercial: how will the necessary inputs for the project be supplied and are the arrangements for the disposal of the product satisfactory?
4. Incentives: does things go as they are planned?
5. Economic: does the proposed project consistent from the view point of national development?
6. Managerial: does their exist capable manager to run the planned project successfully and are they given sufficient power and scope to do what is required?
7. Organizational: is the project organized internally and externally into units, etc so as to allow the proposals to be carried out properly, and to allow for change as the project develops? Frequently these questions are the subjects of a specialized appraised report. On the basis of this report, final decisions are made about whether to go ahead with the project or not. Following appraisal, some projects may be discarded.

**Project Implementation**

In this stage, funds are actually disbursed to get the project set up and running. Translating project plan into actual investment and operation is one of the most critical and difficult task. No matter how sophisticated or detail the project preparation work, it has no value unless it is transformed into action or implemented.

Implementation can be defined as a project stage which covers the actual development or construction of the project up to the point at which it becomes fully operational. It includes monitoring of all aspects of the work or activity as it proceeds. It's where the earlier preparations and designs, plans and analysis are tested in the highlight of reality. The project's objectives are realized only when it is successfully implemented.

Implementation stages begins immediately after the final decision on the project and ends when it starts rendering the benefit envisaged. While in earlier stages of project planning there was more thinking and less action, in this stage more actions and less thinking is needed

Project implementation, even though it may involve complex decisions, is essentially a logical and systematic approach. Now a days planning the implementation stage of a project explicitly is one of the activity in project preparation. The better and more realistic a project implementation plan is, the more likely it is that the plan can be carried out effectively and the expected output or benefit realized.

Project analysts generally divide the implementation phase into three different time periods. These are:

1. *The investment period:* when the major project investments are undertaken.
2. *The development period:* when the project's production builds up.
3. *The life of a project:* when full development is reached.

**Project Evaluation**

Once a project has been carried out, it is often useful (but not always done) to look back over what took place, to compare actual progress with the plans, and to judge whether the decisions and actions taken were reasonable and useful. This we call evaluation

Evaluation can be defined as a systematic and periodical gathering, analyzing and interpreting of inputs, information to see the effects and impacts of a development programme/project in order it may be adjusted where necessary.

This kind of analysis can help not only in the management of the project after the initial construction phase, but will also help in the planning of future project. Experience with one project can give rise to new ideas for extension of the project. Generally evaluation of a project helps to determine whether the objectives sets were realistic, given the capacities with which and the circumstances in which they had to be fulfilled, to assess the impact of the project activities.