

CHAPTER 2

PROJECT APPRASIAL AND FORMULATION

2.1 CONCEPT OF PROJECT APPRASIAL

Appraisal is the evaluation of the ability of the project to succeed. Project appraisal is the process of assessing and questioning proposals before resources are committed. This is an evaluation report of proposed project that is prepared before signing the agreement or memorandum of understanding (MOU). Project appraisal is a process of detailed examination of several aspects of a given project before recommending the same. The objective of the project appraisal is to study and compare the possible feasible project and select the best one.

Project appraisal is systematic analysis of a proposed project's viability using financial and economic appraisal tools to determine the cost-benefit of proceeding with the project and its cost-effectiveness in meeting its intended objectives. A standard criterion is then used to compare several project alternatives.

Appraisal is done systematically to provide an overall assessment of the project's likelihood for success. The institution that is going to fund the project has to satisfy itself before providing financial assistance for the project. The lending institution has to ensure that the investment on the proposed project will generate sufficient returns on the investments made and that loan amount disbursed for the implementation of the project will be recovered along with interest within a reasonable period of time.

Project Appraisal Answers two important Questions

1. Will the project meets its objectives?
2. How does the project compare with other competing projects? (if more than one project has been found feasible)

The primary function of appraisal is to evaluate a project's ability to · achieve its objective.

- For private project, profitability is the objective (financial profitability).
- For Public project, socio economic development is objective (economic profitability).

Project Appraisal Document should include the following:

1. Project Introduction
2. Project Objective and Scope
3. Project Description

4. Implementation Plan
5. Executing Agency
6. Project Organization
7. Parties Involved in project
8. Project Budget and Schedule
9. Benefits and Output of Project
10. Project Monitoring and Evaluation.

After the completion of project appraisal, the following issues are addressed:

- Whether or not the objective of the project has been successfully achieved?
- Whether or not resources were properly utilized?
- Whether or not project completed within the stipulated time?
- Whether or not decisions taken during project implementation were really useful?
- Whether or not the quality of product and services of the project are according to standards?

Factors to be considered during project appraisal (appraisal factors)

The feasibility study serves as groundwork for appraisal. The aspects covered in feasibility study are re-examined during appraisal. These aspects are technical, economic, marketing, financial, managerial, and environmental.

2.2. PROJECT PROPOSAL

Project proposals are documents designed to present a plan of action, outline the reasons why the action is necessary, and convince the reader to agree with and approve the implementation of the actions recommended in the body of the document. It is simply a device used to bring revenue to the concerned organization. It is extensively used in industrial, governmental and academic circle. From project management viewpoint, proposal simply means a blue print of project activities. It is a set of documents needed to evaluate the project, which is under consideration. The set of documents, submitted for evaluation of project is called proposal.

CONTENTS OF PROJECT PROPOSAL

Every project is unique and different to each other. For instance, the development of project proposals relating to establish drinking water supply, to construct school building, conducting detailed feasibility, study of hydropower (DPR), to provide

some health facilities, to conduct socioeconomic survey, to conduct training packages etc. may differ to great extent. Since each project proposal entails its own uniqueness, it is not possible to get a standard format for developing a project proposal equally applicable for all types and natures of projects. However, the contents of all types of project proposal are broadly classified into two parts: technical and financial. Some time management part is highlighted separately from technical part.

1. Technical part of project proposal

Technical part of the proposal gives the technical details and descriptions of the project. The contents of technical part are:

- a. Problem statement: description of the project problem
- b. Special requirements: any special requirements as specified in TOR by client is described
- c. Test and inspection: procedures related to testing, quality assurance, reliability and compliance along with specifications are prepared
- d. Logistics: details of equipment, facilities, skills and administrative aspects are listed
- e. Reporting: formats, timing and nature of reporting should be highlighted.
- f. CV: CV of key persons for the execution of the proposed project is listed along with details
- g. Capability statement: organizational capability and past similar work experience is focused in this part

2. Financial part of the project proposal

It deals with the financial details of the project. The financial part of proposal covers the aspects like:

- a. Cost of basic materials
- b. Statement of work
- c. Cost summary
- d. Supporting schedules
- e. Profit statement
- f. Elements of cost
- g. "Cost break down and work break down structures
- h. Cost estimating techniques

In this part generally format of BOQ (provided along with TOR or bid document) is prepared and rate is quoted for the proposed work.

3. Management part of the proposal

It incorporates the administrative and management capability of the proposing organization in terms of:

- Organizational structure
- The financial stability
- Financial litigation history
- Accounting system
- Employee safety, health & Labor related aspects
- Cost and schedules
- Past work experiences

2.3 PROCEDURE FOR DEVELOPING PROJECT PROPOSAL

Project proposal is a blueprint of project and it should be developed professionally. A project proposal development is logical, systematic and professional activities which involves various steps..

Step 1: Project brief (Statement of Work)

Statement of work is prepared by the client at the project formulation phase. It is also known as wish list of the client which describes the needs and requirements. It is provided by the client in the form of TOR. The major contents covered in SOW are:

- Need and description of the project
- Scope of the project
- Predetermined objectives and output / outcomes of the project
- Funding constraints and budget:
- Specifications, quality assurance and acceptance criteria
- Project schedules
- Reporting system
- Monitoring and evaluation mechanism etc

Step 2: Pre/Feasibility study

This study is carried to find the implement ability of the proposed project. If the proposed project work is to carry out the detailed feasibility study (DPR) then client has prepared the pre- feasibility study report but if the proposed project is the construction of infrastructure client should prepared the feasibility study. It covers the aspects like technical analysis, economic analysis, financial analysis, market analysis, management analysis and environmental analysis. Technical feasibility is the main focus aspect of pre/feasibility study,

Step 3: Preliminary/detailed design

This phase is also known as conceptual design or architectural design. It is the expanded form of project idea and is based on pre/feasibility study. The objective of this phase is to create a design that will correctly and completely implements the requirements shown by study. It includes technical aspects like survey, engineering drawings, project schedule, WBS, estimated project cost etc.

Step 4: Proposal Development

This is the final step of the procedures in developing project proposal. According to the SOW, pre/feasibility study and preliminary design the project proposal is then developed integrating with the goal and objectives of the proposing organizations. It contains following details

Executive Summary

It is a short summary statement, which includes fundamental nature of the project proposal in simple and non-technical language. It should focus on general advantages that can contribute or obtained from its implementation.

Cover Letter

It is the main document for selling of project ideas. It should be prepared with maximum attention and provide the total perspectives of project.

Analysis of Technical Issues

It covers the technical problems and the approach to tackle the problem. It describes the project to be undertaken. It should highlight the general method of resolving the key problem. It should take note of test and inspection procedures to assure performance, quality, reliability and compliance with specification.

Implementation of Project

It contains the estimate of time, cost and materials. It should show the project schedule by preparing Bar chart, CPM/PERT, periodic review. of human resources; equipment's and other resources are estimated. Milestones are indicated on the bar chart.

Managerial Analysis of Project

The project should include a detailed description of the ability of the proposer to supply the routine facilities, equipment and skills needed now and during project implementation. It should explain how the project would be administered. It should highlight how it will maintain the contact with sub-contractor, how progress reports, audit and evaluation are covered, and how the final documentation will be prepared for the users. This also highlights how the project will be terminated.

Profile of Proposing Group

It should contain the past experience of the proposing group i.e. the list of all key project personnel together with their titles and qualification. A full resume is prepared for each principal for the outside client.

In brief, project proposal should include project brief, the feasibility study, preliminary design, proposal development, executive summary and appendices if any. When preparing project proposal, whatever method is adopted, it should be kept in mind that the basic purpose of the document is to convince a potential funder that the group and the project are worth considering for support. Thus, the proposal should be written in lucid way to appeal the potential funders or clients.

2.4 TECHNIQUES OF PROJECT FORMULATION

A project needs to be fully defined in order to provide terms of reference for the management of project. It usually involves:

- Identification of Needs
- Project Ideas
- Project Proposal
- Project Formulation

UNIDO has prescribed pre-feasibility studies, techno-economic feasibility and detailed project report in project formulation. Numerous techniques can be used in formulation of project. Most commonly used techniques are as follows:

1. Feasibility Analysis
2. Cost-Benefit Analysis
3. Input Analysis
4. Environmental Analysis

1. Feasibility Analysis

- It is a process of determining, whether project can be implemented.

- It requires a team of technical experts, economist, financial analyst, managers, environmentalist, sociologist etc.
- If the project is of public nature or development project, all aspects should be analyzed. Much more emphasis is given to the social aspect.
- In private sector, technical, market and financial aspects is given more focus.
- It is usually done to justify the concept of project at disposal, and its further action. It is a backbone of project planning.
- It usually defines parameters of project.
- It should cover the following areas:

Project Appraisal and Formulation

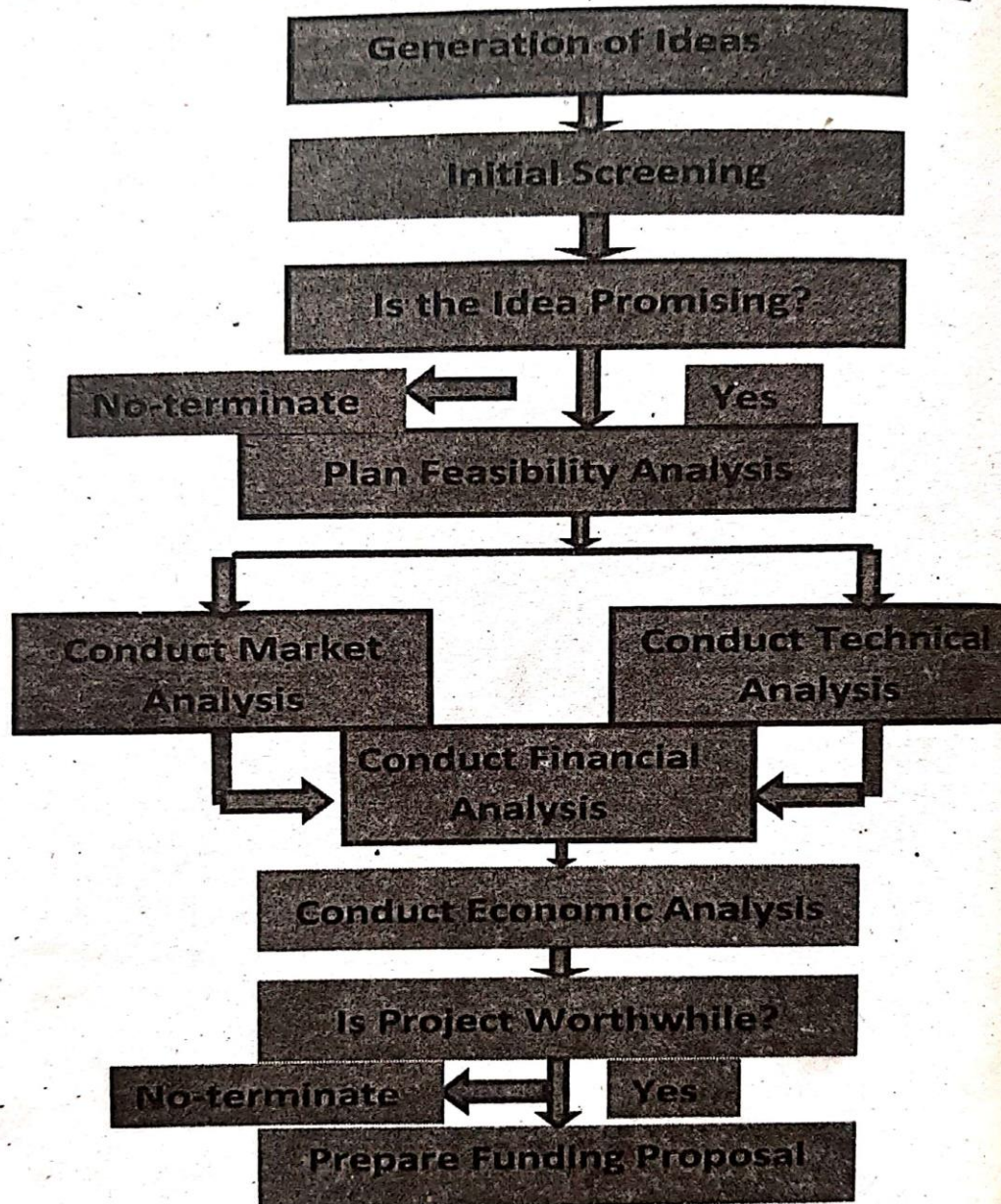


Fig 2.1: Feasibility Analysis

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a) Technical analysis

It seeks to determine whether the prerequisites for the successful commissioning of project has been considered and reasonably good choice have been made with respect to location, size, process, layout of site, scale of production; equipment and machine, human resource requirement, choice of techniques etc.

b) Marketing analysis

- It examines the aggregate demand and market share of the product
- It also focuses on consumption trend, supply position, production capacity, marketing policies, distribution channels, cost structure etc.

(c) Economic analysis

- It deals with net impact of proposed project to the economy and society.
- It judges the project from larger social point of view..
- It examines the social costs and benefits of project. Issues such as economic direct cost and benefits measured in terms of investment and distribution of income in society and contribution of the project towards the fulfillment of employments etc. are analyzed.
- Cost-Benefit analysis is used to assess the overall profitability of the project in the private sector as against the social profitability of the public sector.

(d) Financial analysis

- It seek to ascertain whether the proposed project will be financially viable in the sense of being able to meet the burden of debt servicing and return expectation of the funders.
- The aspects such as investment outlay, cost of project, cost of capital, projected profitability, breakeven point, project financial position and risk are taken into consideration while considering *analysis*.

(e) Managerial analysis

- It examines the institutional viability of project.
- Political and legal acceptability, project organization, project management, key stakeholders, relationship of project with funders, regulatory agencies and support agencies are analyzed in detail.

(f) Socio-Political analysis

- Socio-political analysis is a systematic study of the social, political and economic relation and factors that shape a particular environment and how these affect the lives and opinions of those live within it.

- It is necessary because this forces positively or negatively impact project implement-ability a lot.

2. Cost Benefit Analysis

- It is concerned with judging a project from social point of view.
- In simple term it is known as economic analysis of the investment proposal from the larger social point of view. Therefore it is regarded as social cost benefit analysis (SCBA) in general.
- Cost benefit analysis is the comparison of different projects competing for the same resource budgets.
- In such evaluation, the focus is on the social costs and benefits of the project, which may often be different from monetary costs and benefits.
- It is the methodology developed for evaluating public investment particularly in developing countries, where government plays a lead role in economic development.
- It examines the profitability of project ability to earn net profit to investors. In public project, it focuses on social profitability expressed in terms of economic growth, social development, employment generation etc.
- It is used to determine whether or not specific project should be undertaken, which of the possible alternative project should be selected and within time cycle is beneficial to the project.

Procedure for SCBA

- Determine the problem
- Ascertain alternative solutions to the problem
- Estimate costs and benefits
- Decide on the optimal solution
- Comparison of cost and benefits
- B/C ratio computing
- *IRR*
- NPV

Limitations of SCBA

- The estimation of costs and benefits are subjective and lack accuracy
- Social costs and benefits are difficult to forecast and quantify
- Spin-off benefit remains un quantified

3. Financial Analysis

- It basically aims at examining the project from the angle of capital cost, operating cost, working capital requirement, profitability, financing arrangement etc.
- More over besides servicing social benefits, the. money invested in the project must bring a fair rate of return.
- Payback period, average rate of return, discounted cash flow, debt service coverage ratio, sensitivity and breakeven analysis are used in financial analysis.

4. Input Analysis

- It makes the analysis of human and non human resources of the project.
- The human resource analysis focuses on acquisition, utilization, development and maintenance of workforce in a project.
- It also includes allocation of responsibilities, job · description and job specification.
- Non human resources include material, their supplies, quantity and quality machinery, information, production technology, plant capacity etc.

5. Environmental Analysis

- It focuses on impact of project on environment.
- Issues such as pollution, soil erosion, resource depletion, damage to ecology, and other negative and positive effects of project on environment are analyzed.
- Environmental suitability i.e. the capacity of environment to support the project is examined.

It studies the impact of the project on the environment. The areas of focus for environmental analysis are Environment Suitability and Environment Impact.

- a) Environmental Suitability: A Resource management aspect of project is given prime consideration to examine the project as environmental suitability.
- b) Environmental Impact: Environmental Impact Assessment is carried out to identify the impact of the project in environment. The mitigation measures for the probable impact are justified in EIA.