

Mekdela Amba University

College of social science and Humanities

Department of Geography and Environmental study

1. Course Introduction

Course Name: Project Design and Management

Year: Year II/ Semester II

Target Group: Geo and Environ'tal Studies 2nd year students

Mode of delivery: Parallel

Course code: GeES2072

Instructor's Name: Nibret S.

Course Credit hour: 2

Email: nibret.sefiw99@gmail.com

2. Course Description

The course is planned to acquaint students with basic principles, approaches, techniques and activities in the project cycle. Starting from conceiving the idea of a project to its screening, analysis and project appraisal; financing of the project and project implementation and finally its evaluation will be the part of the discussion in the course. The course will also expose the students with basic terminologies and concepts of project development. Further, the course will be related to project idea identification, project preparation, project appraisal, planning for project implementation and management and at last project monitoring and evaluation.

3. Course Objectives

At the end of this course students will be able to:

- ❖ Understand the basic concepts of project planning and evaluation.
- ❖ Identify the major approaches, procedures, techniques and
- ❖ Activities in the development of a project.
- ❖ Understand the basic techniques of project appraisal.
- ❖ Explain the cost and benefit of a given project.
- ❖ Develop the skill of project designing.
- ❖ Develop the skill of basic techniques of project evaluation/ review.
- ❖ Develop small-scale projects in GeES at community level.

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5 Teaching Methodology:

❖ Lecture, discussion, project work, presentation.

6 Assessment Techniques

❖ Project proposal writing and presentation20%

❖ Individual project (2) -----20%

❖ Quiz (2) -----10%

❖ Final examination ----- 50 %

7 Course Policy and ground rule

- ❖ Attendance is mandatory.
- ❖ Expectation for Classroom Behavior including Contribute in class discussion, meet assignment deadlines, Courtesy and respect, Discipline, Punctuality, Cell phones must be switched off
- ❖ Late submission is not acceptable
- ❖ Plagiarism
- ❖ Missing Exam and Tests (medical case & emergency only)

8 REFERENCES

1. Chandra, P (2006). Project Planning, Analysis, Timing Implementation and Review. Tata McGraw-Hill Publishing Company Limited, New Delhi.
2. Little, I.M.D. and Mirrlees, J.A (1974). Project Appraisal and Planning for Developing Countries. Basic Books Inc., Publishers, New York.
3. Lock, D. (2000) Project Management, Gower Publishing Limited. Hampshire, England.

Chapter One: Introduction to Project

Introduction

Project is a series of activities aimed at bringing about clearly specified objectives within a defined time period and within a defined budget. An under taking for the purpose of achieving established objectives, within a given budget and time period. Project has defined start and end, specific scope, cost and duration. It is a temporary endeavor undertaken to create a unique product, service or result.

1.1 Basic concept of Project

The term 'project' has a wider meaning to include a set of activities and different authorities defined project in different ways. Let us now consider some definitions of 'project'.

The Project Management Institute defines a project as a temporary endeavor undertaken to create a unique product or service. Temporary means that every project has a definite end. Unique means that the product or service is different in some distinguishing way from all similar products or services.

Dave Cleland and Lew Ireland (2004) describe a project as "a combination of organizational resources pulled together to create something that did not previously exist and that will provide a performance capability in the design and execution of organizational strategies".

According to the encyclopedia of management, "project is an organized unit dedicated to the attainment of goal, the successful completion of a development project on time, within budget, in conformance with predetermined programme specification.

Project in general refers to a new endeavor with specific objective and varies so widely that it is very difficult to precisely define it. Some of the commonly quoted definitions are as follows. Project in general is a unique and an intervention process, consist of a set of planned, interrelated, coordinated and controlled activities designed to achieve defined objectives within a given budget at a specified period of time. It may be noted that each project is differ in composition, type, scope, size and time.

A project is accomplished by performing a set of activities. For example, construction of a house is a project. The construction of a house consists of many activities like digging of foundation pits, construction of foundation, construction of walls, construction of roof, fixing of doors and windows, fixing of sanitary fitting, wiring etc.

Another aspect of project is the non-routine nature of activities. Each project is unique in the sense that the activities of a project are unique and non-routine. A project consumes resources. The resources required for completing a project are human, material, money and time. Project require careful coordination and control in terms of timing, precedence, cost, and performance. The project itself must often be coordinated with other projects being carried out by the same parent organization.

A Characteristics of project

Projects differ in size, scope, cost and time, but all have the following characteristics:

- ☞ project is a one-time or temporary activity
- ☞ A project is unique activity and non- routine
- ☞ A project has a definite beginning and end.
- ☞ A project has a life cycle
- ☞ Projects have a primary customer or sponsor.
- ☞ A project Involves risk and uncertainty.
- ☞ Project needs Capital investment
- ☞ Object oriented
- ☞ Specific geographic location
- ☞ Interdependencies
- ☞ Team Work
- ☞ Single Entity
- ☞ Complexity

B Project and programme

The difference between project and programme are:

Project	Programme
<ul style="list-style-type: none"> ✓ Project is a single activity ✓ Project is time bounded ✓ Project is narrow and specific in scope ✓ Example <ul style="list-style-type: none"> ❖ Hydroelectric projects ❖ the sugar development projects ❖ Cement projects 	<ul style="list-style-type: none"> ☞ Programme is a group of projects ☞ wider in scope ☞ Completed over a long period of time ☞ Example: <ul style="list-style-type: none"> • Infrastructural development • Reducing the distribution of

<ul style="list-style-type: none"> ❖ Rail way projects ❖ Road projects ❖ Housing development projects ❖ Higher education projects ❖ Irrigation projects etc. 	<p>Malaria</p> <ul style="list-style-type: none"> • Development of social service etc.
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C. CLASSIFICATION OF PROJECTS

Much of what project will comprise and consequently its management depends essentially on the category it belongs to. There is no standard classification of the projects. However, Projects can be categorized according to activity, location, time, ownership, size and by type.

- ❶ **According to Activity:** Under this category, projects can be classified as industrial (commercial projects) and non-industrial projects Industrial projects are set up for the production of some goods. A non-Industrial project are projects which are undertaken without money making mission that comprises health care projects, educational projects, irrigation projects, soil conservation projects, highway projects etc.
- ❷ **According to Location:** Location wise, projects can be categorized as national and international projects. **National projects** are those set up in the national boundaries of a country, while **international projects** are set up by the government of private sector across the globe.
- ❸ **According to Completion Time:** Projects under this category can be divided into two types, viz; normal and crash projects. In case of **normal projects** there is no time constraint. **Crash projects** are those which are to be completed within a stipulated time, even at the cost of ending up with a higher project cost.
- ❹ **According to Ownership:** Projects under this category can be grouped into public, private and joint sector projects. **Public sector projects** are owned by the Government. In **private sector projects** ownership is in the hands of the project promoters and investors. **Joint sector projects** are those in which ownership is shared by the Government and private entrepreneurs.
- ❺ **According to Size:** Based on size, there may be three categories of projects, viz; small, medium and large.

- ⑥ **According to type:** project can be new project, expansion project, updating project, capital project, soft project, commercial project and social project.
- A. New project: - It is new construction. It is a combination of new production and new investment.
 - B. Expansion project: - is the process of extending the existing project. It is the acquisition, construction, installation and equipping of a retail, office or other commercial development projects.
 - C. Capital project: - is a long term and capital-intensive project that helps to maintain and improve a city asset including d/t infrastructure. Focused on hard activities which include railways, dams, pipelines, power plants land and building. It is major and expensive project to create or improve capital assets.
 - D. Updating project: - is the process of changing and replacing the existing activities through different techniques to bring outputs. It is also the process of replacing a product with a newer version of the same product. is to improve the quality or value of an existing product or service by adding or replacing the existing project.
 - E. Commercial project: -is revenue generation projects. It is the construction of structures and facilities for commerce and business. Commercial project includes retail shops, restaurants, hotels, medical building and hospitals, industrial shops and office buildings.
 - F. Soft project: - a project focused on training and management issues and also focused on theoretical aspects.
 - G. Social project: - it is service rendering or social engagement project. This project is related with the public services which include education, health, potable water, build a house and road project.

D. PROJECT MANAGEMENT

Project management is the process of identifying project opportunities, formulating profitable project profiles, procuring funds for project implementation, scheduling of project activities in such a way as to complete the project within the minimum possible time/cost, and monitoring of the project after its implementation.

According to Project Management Institute (PMI), Project Management is the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations.

Project management is a multifaceted process concerning different project related activities such as planning, monitoring, control, planning, organizing, securing and managing resources that helps an organization achieve its project results.

The purpose of project management is to foresee or predict as many of the dangers and problems as possible and to plan, organize and control activities so that projects are completed as successfully as possible in spite of all the risks. This process starts before any resource is committed, and must continue until all work is finished. The primary aim of the project manager is for the final result to satisfy the project sponsor or purchaser, within the promised timescale and without using more money and other resources than those that were originally set aside or budgeted.

The successful project management is all about structure, control, sufficient attention to detail and continuously driving action. Project management has emerged because the characteristics of our turn-of-the-century society demand the development of the new methods of management. Effective project management is therefore crucial to successful development projects, and hence monitoring and evaluation.

1.2 Meaning and Types of Development plan

1.2.1 Meaning of Development plan

Development is a complex issue, with many different and sometimes contentious definitions. Development refers to an integrated process of interrelated economy, political, social change of once country. It enhances the quality of life through production, provision and utilization of goods and services with people choice and environmental sustainability. Development should be Sustainable which can be defined as development

that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

Development plan happens in many different contexts so to define it succinctly is tricky. Basically, development plan refers to the strategic measurable goals that a person, organization or community plans to meet the expectation of a stakeholder within a certain amount of time.

A development plan is a document which details the overall strategy of the council for the proper planning and sustainable development of an area and generally consists of a written statement and accompanying maps. The Development Plan provides planners with guidelines to follow during the development assessment process. Each Council area has a Development Plan that relates specifically to that area. The detail in Development Plans can differ greatly between Councils as it reflects the different types of areas such as coastal, suburbs, industry and so on. The Development Plan separates land within each Council area into a number of different zones. For each of the particular zones (eg a Residential Zone or an Industrial Zone) the Development Plan will outline what sort of land uses are and are not envisaged for that zone.

Development planning involves decisions or choice about alternative ways of using available resources with aim of achieving particular goals at some time in the future. It serves as a guide to the planning body for making any recommendations for public improvement. It coordinates the physical, economic, social and political forces that govern the structure of the community. Usually the development plan includes time-based benchmarks. The plan usually includes the broad aims of the council for specific topics, e.g. housing, infrastructure, community facilities which are reinforced by more detailed policies and objectives. Development plan is basically a policy document.

Developmental plan indicates: -

- ✎ Boundaries of land of different types such as residential, agricultural, industrial, etc.
- ✎ Boundaries of green belt around the town
- ✎ Contours of the whole city
- ✎ Different zones
- ✎ Land scape features
- ✎ Location of public buildings and town centers
- ✎ Open spaces including parks and playgrounds
- ✎ Positions of natural springs, rivers and streams

- ✎ Position of public utility services such as water supply station, sewage disposal plant, power plant, etc.

✎ Elements of Developmental Plan

- ❶ Land use: - the developmental plan should indicate areas designed for residential, commercial, industrial, socio cultural, recreational, administrative, and other uses
- ❷ Circulation: - developmental plan shows the road, streets, railways, waterways, airways, terminal facilities, transit system etc. for the movement of people, goods and services.
- ❸ Utilities, services and facilities: - the developmental plan should indicate the desirable location, size and other particulars regarding public utilities like water supply, sewerage and power, and other services
- ❹ Civic design: - the developmental plan should depict the design of important elements of the city like civic center, the central business district, shopping centers and cultural areas.
- ❺ Open spaces: - the developmental plan indicates the location and extent of desirable open space for parks, playgrounds, stadiums, gardens, crematoria etc.

1.2.2 Types of Developmental Plan

Developmental plan can be classified in to five based on the scope of coverage.

A. National development plan

The national developmental plan is a long-term plan prepared and developed by country councils. A National Development Plan shows a large-scale investment project to develop the infrastructure of a country. This can include development of the economic infrastructure, education, social welfare, science, and innovation. It requires central planning and monitoring on a national level.

National developmental plan includes growth and transformation plan II (2015/2016 – 2020/21). It is a national five-year developmental plan created by the Ethiopian government. Ethiopia's Growth and Transformation Plan II (GTP II) aims to spur economic structural transformation and sustain accelerated growth towards the realization of the national vision to become a low middle-income country by 2025. GTP II focuses on ensuring rapid, sustainable, and broad-based growth by enhancing the productivity of the agriculture and manufacturing sectors, improving the quality of production, and stimulating competition within the economy. The GTP gives special emphasis to agricultural and rural development, industry, infrastructure, social and human development, good governance and democratization.

The overall objective of the GTP is: -

- to sustain broad based, fast, and equitable economic growth so as to eradicate poverty in due course.
- Expand and ensure the qualities of education and health services and achieve MDGs in the social sector.
- Establish suitable conditions for sustainable nation building through the creation of a stable democratic and developmental state; and
- Ensure the sustainability of growth

B. Regional Development plan

This kind of plan is applied at regional level which focused on the economy, resource and mobility over regional space. Regional developmental plan deals with the efficient placement of land use activities, infrastructures resource, settlement growth, Transport facilities, Environment and sustainability, Regional policy and developmental strategy and disaster management plan.

C. Urban Development plan

Urban developmental plan is an ideal plan showing the full development of the town at some future date. Urban development plan is concerned on the physical development of a city for its efficient functioning and enhancement, natural and built environment, taking into consideration the existing requirements and the future needs, with population as the basic parameter.

UDPs identify particular areas as suitable for housing, industry, retail or other uses, and set out the policies which the authority proposes to apply in deciding whether or not development will be permitted. The preparation of UDPs gives the community the opportunity to influence the detailed policies and specific proposals for the future development and use of land in their area. Because the plan forms the statutory basis for planning decisions, urban people are involved in its preparation.

There are various urban planning authorities under each province/state that assess the growth of areas, identify suitable areas for housing, industry, public infrastructure and allocate budgets.

✎ Main function of urban developmental plan

- ✎ To develop the town or city as a combined unit and maintain a balance between the spatial allocations for the distribution of facilities

- ✎ Formulation of policies for the development of the town/city, aiming at the decentralization of city center
- ✎ Presenting broad circulation links for intercity and intracity traffic and a multi modal mass transport system
- ✎ Preservation of the natural features of the city/ town

D. Zonal Development plan

Zonal developmental plan is a detailed plan for a zone conceived and prepared within the framework of a master plan containing proposals for various land uses, roads and streets, parks and open spaces, community facilities, services and public utilities etc.

Aims at evolving efficient activities and space relationship through layouts and spatial details.

- ✎ Main function of zonal developmental plan
 - ☞ Details out and elaborates the policies of the master plan
 - ☞ Contains a land use plan for the development of the zone and show the approximate locations and extent of land uses proposed in the zone
 - ☞ The schemes and layout plan indicating land use should confirm to the master plan

E. Local area developmental plan

Local area developmental plan is prepared by district councils. Local area plan (LAP) set out a strategy for the proper planning and sustainable development of specific area within a local authority and for a time scale as specified by the authority. It sets out a strategy for the proper planning and sustainable development of an area.

- ✎ Functions of Local area developmental plan
 - ➡ It gives plot level detail and parcel map preparation
 - ➡ It also used to check if the master plan is confirming with land use

Local area plans identify particular areas as suitable for housing, industry, retail or other uses, and set out the policies which the authority proposes to apply in deciding whether or not development will be permitted. The preparation of Local Plans gives the community the opportunity to influence the detailed policies and specific proposals for the future development and use of land in their area. Because the plan forms the statutory basis for planning decisions, local people are involved in its preparation.

Chapter Two: Project and Development Plan

Introduction

A development plan shall set out an overall strategy for the proper planning and sustainable development of the area of the development plan and shall consist of a written statement and a plan or plans indicating the development objectives for the area in question.

The Development Plan will also outline various objectives, principles and policies further controlling and affecting the design and other aspects of proposed developments. These policies can cover a range of social, environmental and economic matters. The overall strategy for the proper planning and sustainable development of the area.

2.1 Interface between Development plan and Project

- ✎ Developmental plan is the proposed plan of different activity designed to achieve broader objectives while Project is a temporary endeavor designed to accomplish a specific outcome.
- ✎ Developmental plan comprised different activities (public utility, public service, land use etc.) while Project comprised of a single or specific activity.
- ✎ Developmental plan is a list of actions which should be performed in the future time while Project is an actual process of execution of these actions.
- ✎ Developmental plan is a collection of the individual steps aligned with time scales and milestones that need to be executed to deliver the initiative or project across a given time deadline or period while a project is comprised of single individual tasks that aim at specified outputs or deliverable products.
 - ✎ The relation between developmental plan and project
 - Developmental plan and projects need human capital, financial capital, material capital, time, etc.
 - Developmental plan and projects involve risk and uncertainty
 - Developmental plan and projects have their own scope
 - Developmental plan and projects stand for better outcomes
 - Developmental plan and projects are carried out based on the involvement of different actors
- ✎ A project is defined as a temporary activity aimed at achieving specific/narrow organization objectives. A developmental plan provides as a guide for the implementation this objective. Thus, it establishes the goals, deliverables, and the level of collaboration for projects.

2.2 Aspects of Project planning

Planning is an arrangement for doing something which is considered in advance. It means determining what is to be done how, when and by whom. It lays down the objective of pursuit and a specific course of action to achieve it. Planning is deciding in advance what to do, how to do it and who is to do it. Planning bridges the gap from where we are to where we want to go. It makes it possible for things to occur which would not otherwise happen.

Project planning involves a series of steps that determine how to achieve a particular community or organizational goal or set of related goals. This goal can be identified in a community plan or a strategic plan. Project plans can also be based on community goals or action strategies developed through community meetings and gatherings, tribal councilor board meetings, or other planning processes. Project planning is defined as developing the basis for managing the project, including the planning objectives, deliverables, interim work products, procedures, organization, chain of activities, resources types and numbers, timing, routines and finances. The basic principle of development project planning is to maximize the benefits of individuals and society through efficient allocation of scarce resources.

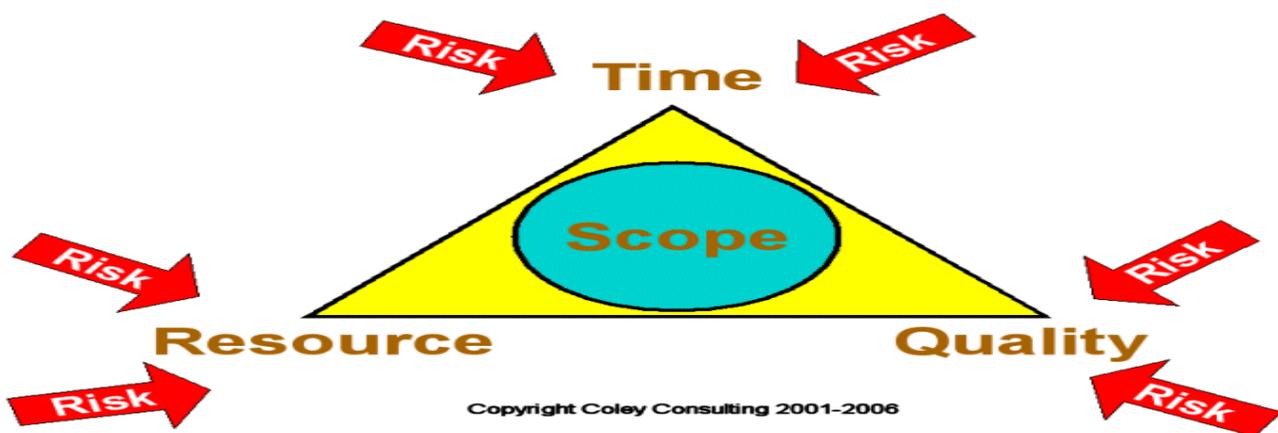
Project planning is crucial for project success. The objective of the project plan is to describe, in the most detailed manner, the potential of the project, prior to its organization and implementation. The plans created during this phase will help you manage time, cost, quality, changes, risk, and related issues. They will also help you control staff and external suppliers to ensure that you deliver the project on time, within budget, and within schedule. The project planning phase is often the most challenging phase for a project manager.

👉 Project Planning helps to:

- ☞ Guides for the implementation of the project.
- ☞ Reduces risks and uncertainty
- ☞ Ensures smooth running of projects.
- ☞ It ensures the right direction.
- ☞ Identifies issues that need to be addressed
- ☞ Make the best use of resources
- ☞ Achieve the best results
- ☞ Deliver projects on time and on budget
- ☞ Manage time and costs better

A project plan can be considered to have five key characteristics that have to be managed:

- ❖ **Scope:** defines what will be covered in a project. The scope is simply all the work that needs to be done in order to achieve a projects objective. It is the process of identifying and documenting specific project goals, outcomes, tasks, costs and time line dates specific to the project objective.
- ❖ **Resource:** what can be used to meet the scope. Project resources are defined as the people, capital, and material or supplies needed for successful management and completion of a project.
- ❖ **Time:** what tasks are to be undertaken and when. Timeline is analyzed and developed for the completion of a project.
- ❖ **Quality:** the spread or deviation allowed from a desired standard. It can be defined as a product or service that has the ability to perform satisfactorily and is suitable for its intended purpose.
- ❖ **Risk:** It is uncertain event or condition that will occur in any project. It defines in advance what may happen to drive the plan off course, and what will be done to recover the situation. The risk includes cost risk, schedule risk, performance risk etc.

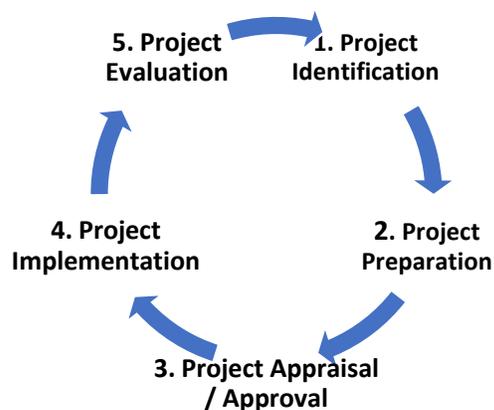


Chapter Three: Project Development

Introduction

Before starting the project development process, your community should engage in a project planning process. Project planning involves a series of steps that determine how to achieve a particular community or organizational goal or set of related goals. This goal can be identified in a community plan or a strategic plan. Project plans can also be based on community goals or action strategies developed through community meetings and gatherings, tribal council or board meetings, or other planning processes.

Project development is a process of project preparation. Project development involves several distinct phases, with differing purposes and levels of detail. Project cycle has five major stages. These are identification, preparation, appraisal, implementation and evaluation. The first two stages are largely the responsibility of government, which may intend to finance a project from its own resources or to seek external assistance, though donor agencies may play an influential role.



3.1 Generation and Screening of project Idea (Identification)

Project identification is the first stage of the project cycle. Project identification is a search for promising project ideas could contribute towards achieving specified development objectives. Project identification starts from an understanding of the mandate and objectives, identifying environmental problems to be addressed and the needs and interests of possible beneficiaries and stakeholders. Next, a project developer needs to find out if someone else (preferably from a neighboring country) has the same (or similar) need. The problems and the most realistic and effective interventions are analyzed, and ideas for projects and other actions are identified and screened. Identifying suitable project ideas is the most important step in the whole process of project preparation because project selection process starts with the generation of ideas.

Project idea generation is the process of creating, developing, and communicating ideas which are abstract, concrete, or visual.

The project idea selection is selection of project idea from available alternatives is to be best suited to the entrepreneurs' capacity, competence and willingness. Generation and screening of a project idea begins when someone with specialized knowledge or expertise or some other competence feels that he can offer a product or service. Project idea is usually hatched through discussions by specialists and local leaders in a community need based on issues and turned into a proposal.

✎ Project ideas generation is depending on:

- Consumer needs
- Market demand
- Resource availability
- Technology
- Natural calamity
- SWOT analysis
- Political considerations etc.

Project ideas are formed from several sources based merely on some vested interests of the individuals involved. However irrespective of their origin, project ideas should be in general aim at overcoming constraints on the national development effort.

✎ Sources of project ideas can be categorized into two they are:

1. Micro level sources
2. Macro level sources

1. Micro level

At micro level project ideas can be generated from various sources. Some of these are discussed below.

A. Analysis of the performance of existing industries; A study of existing industries in terms of their profitability utilization can indicate promoting investment opportunities which are profitable and relatively risk free. An examination of capacity utilization of various industries provides information about the potential for further investments. Such study is more useful if it is done

region wise. Particularly for products which have high demand for consumption and wide scope for production.

- B. Examination of the input-outputs of various industries:** The analysis of inputs required for various industries may throw some project ideas. Opportunities exist when Materials, purchased parts, or supplies are presently procured from distance sources with considerable time lag and transportation cost and several firms produce internally some components parts which can be supplied at lower cost by a single producer who can enjoy economics of scale. Similarly, a study of the output of the existing industries may reveal opportunities for adding value through further processing of the main outputs, by produce, by products as well as waste products.
- C. Review of imports and exports;** Analysis of import statistics for a period of five to seven years is helpful in understanding the trend of imports of various goods and the potential for import substitution. Indigenous manufacture of goods currently imported is advantageous for several reasons. It improves the balance of payments situation. It generates employment, and it provides market for the supporting industries and services. Likewise, an examination of export statistics is useful in learning about the export possibilities of various products.
- D. Investigation of local materials and resources;** A search for project ideas may begin an investigation into local resources and skills. Various ways of adding value to locally available materials may be examined. Similarly, the skills of local artisans may suggest products that might be profitably produced and marketed. Such assessment may consider issues such as the human and material resources, Infrastructure facilities and market for various products.
- E. Analysis of economic and social changes:** A study of economic and social trends is helpful in projecting demands for various goods and services. Changing economic conditions and consumer preferences provide new businesses opportunities. For example, a greater awareness of the value of time is dawning on public. Hence the demand for time saving products like prepared food items, ovens and powered vehicles has been increasing. The other change that can be seen during analysis is the increasing desire for the leisure and recreational activities. This has caused a growth in the market for recreational products and services.
- F. Study of new technological developments:** New products are the new process and technologies for existing products developed by the research laboratories may be examined for profitable communication.
- G. Identification of unfulfilled psychological needs:** For well-established multi brand product groups like bathing soaps, detergents, cosmetics and tooth paste, the questions to be asked is not whether

there is an opportunity to manufacture them for satisfying an actual physical need, but whether there are certain psychological needs of the consumers which are presently unfulfilled.

H. Attending trade fairs: National and international trade fairs provide an excellent opportunity to know about new product and developments.

I. Stimulating creativity for generation's new product lines: New product ideas may be generated by thinking along the following lines: Modifications, rearrangements, reversal, magnifications, reductions, substitutions, adoptions and combinations.

2. At Macro level:

At macro level project ideas can be obtained from various sources as mentioned below:

A. Project ideas from government policies and plan:

From time to time governments produce guidelines such as the national development plans and session papers which spell out the directions the government should take to achieve certain targets in various sectors of the economy and guidelines to various organizations and individuals. The information contained in these documents is useful in generating ideas for new projects

B. Project ideas from technical specifications:

For many industrial projects, ideas will usually tend to come from technical specifications, which by virtue of their experience and for research findings will give use full information which may lead to the manufacturing of new products or improving the existing products.

C. Project ideas from local leaders:

For community and social projects, local leaders usually have important ideas, which they together with their local people, have identified as being important in improving the welfare of the people. In the case of social projects depending in which one is to identify, there may be number of other projects which are linked to the identified projects.

D. Project ideas from Entrepreneurs:

For commercial and industrial projects, entrepreneurship is an important source of ideas. Entrepreneurships include the characteristics of preparation of managerial competence and motivation to achieve results. Although entrepreneurship skills have been passed on from one generation to another along Family and

social-economic circles, it has been recognized that programs for entrepreneurship development will help individuals to come up with useful ideas which can be translated into viable projects.

Screening of project Idea

After generating a large number of ideas, a preliminary screening is carried out to shortlist those ideas that can be developed further for implementation. Once a pool of ideas has been generated, the project manager should carefully screen them.

 The following factors that may be considered for preliminary screening of project ideas

-  Compatibility with the promoter's interest: – The idea must be consistent with the interest, personality and resources of entrepreneur.
-  Consistency with Government priorities: – The idea must be feasible with national goals and government regulations.
-  Availability of inputs: – Availability of power, technology, raw material, skilled man power, infrastructure and service.
-  Adequacy of Market: – Growth in market, prospect of adequate sale, reasonable return on investment.
-  Reasonableness of cost: – The project must be able to make reasonable profits with respect to the costs involved.
-  Acceptability of risk level: – projects are fraught with uncertainty and the risk associated with it. We should examine the level of risk involved in a project. The desirability of the project also depends upon risks involved in executing it.

3.2 Preparation and analysis Appraisal

Project preparation is the second stage of the project cycle. Project preparation is the process of analyzing and developing a project idea into a final project ready for implementation. Detailed preparation of the project is done only if the project idea is accepted and the green light is given by the relevant authorities and funding agencies. Appraisal analysis is important to determine whether the project idea is accepted or rejected by the relevant authorities.

Appraisal is critical examination or assessment of the project from all aspects. Project appraisal involves critically examining the basic data, assumptions and methodology used in project preparation to assure project's viability, profitability and sustainability. It often involves comparing various options, using economic appraisal or some other decision analysis technique. The appraisal compresses total evaluation of the performance ratings of the project.

Project appraisal is a consistent process of reviewing a given project and evaluating its content to approve or reject the project, through analyzing the problem or need to be addressed by the project, generating solution options (alternatives) for solving the problem, selecting the most feasible option, conducting a feasibility analysis of that option, creating the solution statement, and identifying all people and organizations concerned with or affected by the project and its expected outcomes. It is an attempt to justify the project through analysis, which is a way to determine project feasibility and cost-effectiveness. Project appraisal often involves making comparison between various options and this done by making use of any decision technique or economic appraisal technique.

Appraisal of projects can be done by many ways, but the most common of them are financial and economic appraisal. In case of financial project appraisal, the company reviews the cost of the project and the expected revenues that will be generated by the project. This type of appraisal helps the company to prevent overspending on a project. It also helps in finding certain areas where alterations can be done for generating higher revenues. Under economic appraisal, the company mainly focuses on the total benefit of the project and less on the costs spent on the project. Other than these two types of appraisal, there are also other types of project appraisal which include technical appraisal, management or organizational appraisal and marketing and commercial appraisal

After a project has been identified, various preparatory works are undertaken to provide a conceptual outline to a proposed project. The proper designing of a project takes place at this stage. Large and mega projects involving foreign or donor financing loans are sometimes prepared by foreign experts at the

consistence of a donor country with the assistance of home country experts in that sector or geographical area. Small and medium projects are prepared mostly by local experts, especially when the government provides funds. Even in those projects, if foreign agencies provide funds it becomes necessary at times to obtain the assistance or approval of foreign experts. Different donors need different types of information and have different formats for a project proposal.

In general, project appraisal is important to extract relevant information for determining the success or failure of a project, to apply standard yardsticks for determining the rate of success or failure of a project and to determine the expected costs & benefits of the project. In order to select a profitable and feasible project, a project manager must carry out a fundamental analysis of the product and factor market to know about entry barriers which lead to positive net present value.

Chapter Four: Project Appraisal Techniques

Introduction

Project appraisal is a cost and benefits analysis of different aspects of proposed project with an objective to adjudge its viability. Project Appraisal is the process of assessing and questioning project proposals before resources are committed. An entrepreneur needs to appraise various alternative projects before allocating the scarce resources for the best project. Thus, project appraisal helps select the best project among available alternative projects. For appraising a project, its economic, financial, technical, market, managerial and social aspect are analyzed.

Project appraisal methodologies are methods used to access a proposed project's potential success and viability. These methods check the appropriateness of a project considering things such as available funds and the economic climate.

4.1 Time Value of Money

Money has time value. The notion that money has a time value is one of the most important concepts in finance and investment analysis. It simply means that money received now has more value than the same amount received in future. The time value of money is at the center of a wide variety of financial calculations, particularly those involving value.

One of the primary roles of financial analysis is to determine the monetary value of an asset. In part, this value is determined by the income generated over the lifetime of the asset. This can make it difficult to compare the values of different assets since the monies might be paid at different times.

Let's start with a simple case. Would you rather have an asset that paid you \$1,000 today, or one that paid you \$1,000 a year from now? It turns out that money paid today is better than money paid in the future. This idea is called the **time value of money**. Time enhances the value of a dollar today and erodes the value of a dollar spent or received in the future. It is necessary to compensate individuals for forgoing their consumption today or lending their funds to a bank. In turn, banks and other financial institutions have to offer lenders interest in order to induce them to part temporarily with their funds. If the annual market interest rate is 5 percent, then 1 dollar today would be worth 1.05 dollars one year in the future. This means that in equilibrium, lenders value 1.05 dollars in one year's time the same as 1 dollar today.

For example, the amount that you are willing to lend today is the loan's present value. The amount that you require to be paid at the end of the loan period is the loan's future value.

A. Present Value

Present Value (PV) is the current value of future cash flows. Computing present value uses the principle of discounting. Further, discounting is calculating the present value of future cash flows using a specified compound interest rate.

B. Future Value

Future value (FV) is the value of current investment at any specified future date. Computing future value uses the principle of compounding. Likewise, compounding is calculating the future value of current investment using specified compound interest.

$$\text{Future value} = \text{present value} + \text{interest}$$

C. Present Value & Future Value Relationship

Following mathematical formula establishes the relationship between present value and future value.

Mathematical expression of Future Value (FV) is; $FV = PV \times (1 + k)^N$

So $(1+K)^N = (1+K) \cdot (1+K) \cdot (1+K) \cdot (1+K) \cdot (1+K) \cdot (1+K) \cdot (1+K) \dots \cdot (1+K)$ for "N" times

Similarly, Mathematical expression of Present Value (PV) is; $PV = \frac{FV}{(1 + k)^N}$

Where; PV = present value, FV= future value, k = discounting factor (rate / interest rate and N = Number of time periods.

The term $(1 + k)^n$ is referred to as discount factor since it is used to translate a future value to its equivalent – present value.

A. Examples of Future Value

1. If \$10,000 is invested in a bank today may earn 5% per year. What is the future value of the \$10,000 for 10 year?

$$FV = PV \times (1 + k)^N$$

$$FV = PV \cdot (1+K) \cdot (1+K)$$

$$FV = \$10,000 \cdot (1.05) \cdot (1.05)$$

$$FV = \$10,000 \times (1.05)^{10}$$

$$FV = \$10,000 \times 1.62889$$

$$FV = \underline{\$16,289}$$

These leaves (1.05) as the factor.

2. Find the value of \$10,000 in 10 years. The investment earns 8% for four years and then earns 4% for the remaining six years. What is the future value of this project?

$$FV = PV \cdot (1+K) \cdot (1+K)$$

$$FV = \$10,000 \cdot (1.08) \cdot (1.08) \cdot (1.08) \cdot (1.08) \cdot (1.04) \cdot (1.04) \cdot (1.04) \cdot (1.04) \cdot (1.04) \cdot (1.04)$$

$$FV = \$10,000 \times (1.08)^4 \times (1.04)^6$$

$$\underline{FV = \$17,214.53}$$

3. How much will \$10,000 placed in a bank account paying 5% per year be worth compounded annually?

A. Factor out the \$10,000.

$$10,000 \times (1+0.05)$$

$$10,000 \times 1.05 = \underline{\$10,500}$$

B. These leaves (1.05) as the factor.

B. Examples of Present Value:

Same idea, but begin at the end. Rearrange the Future value equation to look like this:

$$PV = FV \div [(1+K) \cdot (1+K) \cdot (1+K)]$$

$$PV = FV \div (1+K)^N$$

Example: How much do I need to invest at 8% per year, in order to have \$10,000 in__.

a. One year: $PV = 10,000 \div (1.08)$

$$= \underline{\$9,259.26}$$

b. Two years: $PV = \$10,000 \div (1.08) \div (1.08)$

$$\text{OR } \$10,000 \div (1.08)^2$$

$$= \underline{\$8,573}$$

Where, NPV= Net present Value, CF= Cash flow Function, r= discounting factor (rate / interest rate and t = Number of time periods.

A positive NPV means that the sum of present value of future cash flow is greater than the cash outflow. This implies that the project is profitable and hence acceptable.

if NPV is positive (i.e. greater than 0) Accept the project

A negative NPV means that the sum of present value of future cash flow is less than the cash outflow. This implies that the project is not-profitable and hence rejected.

if NPV is negative (i.e. less than 0) Reject the project

When comparing NPV values of two or more projects always select a project with greater NPV. While comparing different NPV values a high NPV value indicates higher profitability.

Always select the project with greater NPV

Further, NPV equals to zero implies that the project generates cash inflow equal to the cash outflow. Hence it suggests that the project will neither be profitable nor it will be at loss.

e. g.1 Assume an investment has cash flows of -46,100-birr, 21,250-birr, 14,950 birr and 14,100 birr for years 0 to 3 respectively. What is the NPV if the required return is 11.9%? should the project be accepted or rejected?

Solution

K=11.9%

$$PV=21,250/(1 + 0.119)^1+14,950/(1 + 0.119)^2+14,100/((1 + 0.119)^3$$

$$=21,250/1.119+14,950/1.252161+14,100/1.401168159$$

$$=18,990.2+11,939.36+10,063.032$$

$$=40,992.59$$

$$NPV= 40,992.59-46,000= -5,107.41$$

Therefore, NPV is negative and results reject the project.

2. Internal Rate of Return (IRR)

This method is popularly known as time adjusted rate of return method/discounted rate of return method also. Internal rate of return is the discount rate(k) at which the present value of benefits is just equal to the present value of costs for the particular project.

As the determination of internal rate of return involves a number of attempts to make the present value of earnings equal to the investment, this approach is also called the Trial and Error Method. Internal rate of return is time adjusted technique. In other words, it is a rate at which discount cash flows to zero. IRR can be used to compare investments when they have the same scale, timing, term and patterns of benefit.

If the internal rate of return is larger than the cost of funds the project should be undertaken.

Often the IRR is used to rank mutually exclusive project. The highest IRR project should be chosen.

$$IRR = [Sum\ of\ present\ value\ of\ all\ future\ cash\ inflows] - [Cash\ outflow] = 0$$

Internal Rate of Return Project Selection Criteria

- Accept the project when IRR is greater than k
- Reject the project when IRR is less than k

E.g.1 The cost of a project is \$1000. It has a time horizon of 5 years and the expected year wise incremental cash flow are: \$200 in year 1, \$300 in year 2, \$300 in year 3, \$400 in year 4 and \$500 in year 5. Compute IRR of the project. If opportunity cost of capital is 12%. Should we accept the project?

→ First you must be calculating NPV.

Year (n)	FV			PV		K	K	K%	1+K
1	200	(1+K) ¹	1.12	178.5714286		12%	12	0.12	1.12
2	300	(1+K) ²	1.2544	239.1581633					
3	300	(1+K) ³	1.404928	213.5340743					
4	400	(1+K) ⁴	1.57351936	254.2072314				Cash Inflow	
5	500	(1+K) ⁵	1.762341683	283.7134279				Cash outflow	NPV
				1169.184325				1169.184325	169.1843254

$$PV = FV \times \frac{1}{(1+k)^n}$$

Then we must be adjusting the discount rate.

Year (n)	FV			PV		K	K	K%	1+K
1	200	(1+K) ¹	1.177	169.9235344		12%	17.7	0.177	1.177
2	300	(1+K) ²	1.385329	216.5550566					
3	300	(1+K) ³	1.630532233	183.9890031					
4	400	(1+K) ⁴	1.919136438	208.4270779				Cash Inflow	
5	500	(1+K) ⁵	2.258823588	221.3541609				Cash outflow	NPV
				1000.248833				1000.248833	0.248832951

$$PV = FV \times \frac{1}{(1+k)^n}$$

Therefore, IRR=17.7 for this project. Because discount rate 17.7 results NPV become zero.

3. Cost Benefit Analysis (CBA)

Cost Benefit Analysis (CBA) is yet another popular project selection technique. Further, alternate names of cost benefit analysis are Profitability Index (PI) and Benefit Cost Ratio (BCR).

BCR = Sum of Present Value of future cash Inflow / Project Cash outflow OR Cost benefit ratio= present value benefit /present value cost.

✓ Accept the project when BCR is greater than 1

× Reject the project when BCR is less than 1

e.g. 1 An investment has cash flows of -17,500-birr, 10,500-birr, 9,400 birr and 7100 birr for years 0 to 3 respectively. What is the BCR for the set of cash flows if the relevant interest rate is 15%? should the project be accepted or rejected?

Solution

K=15%

$PV=10,500/(1 + 0.15)^1+9,400/(1 + 0.15)^2+7100/(1 + 0.15)^3$

$PV=9,130.435+7,107.75+4,667.98=20,906.17$

$BCR=20,906.17/17,500=1.19$ results accept the project.

4. Payback period

Payback period is the time it takes for any enterprise to recover the initial investment made. Project with shortest payback period is preferred by these criteria. The ‘pay back’ sometimes called as pay out or pay off period method represents the period in which the total investment in permanent assets pays back itself. This method is based on the principle that every capital expenditure pays itself back within a certain period out of the additional earnings generated from the capital assets.

Under this method, various investments are ranked according to the length of their payback period in such a manner that the investment within a shorter payback period is preferred to the one which has longer payback period. (It is one of the non-discounted cash flow methods of capital budgeting). IRR is expressed in terms of the percentage return a firm expects the capital project to return.

$$\text{Pay – back period} = \frac{\text{initial investment}}{\text{Annual cash inflows}}$$

If the actual pay-back period is less than the predetermined pay-back period, the project would be accepted. If not, it would be rejected.

E.g. 1 A project has cash flow of -\$124,000, \$56,600, \$51,400, and \$86,300 for year 0 to 3, respectively. The required payback period is two years. Based on the payback period of _____ years for this project, you should _____ the project.

Initial cash outflow=\$124,000

Cumulative non-discounted cash inflow=

1	56,600	56,000	-67,400
2	51,400	107,400	-16,600
3	86,300	193,700	+69,700

The threshold is between 2 and 3 years. There fore

Partial year = $2 + \frac{16,600}{86,300} = 2+0.1854=$ **2.1854 yrs.** Based on the required pay back of 2 years we would actually reject this project b/c it is not two-year threshold for equipping on investment.

E.g.2 A sum of \$ 25,000 invested today in an IT project, may give a series of cash inflows in future as described as follows. \$5,000 in year 1, \$9,000 in year 2, \$10,000 in each of year 3, \$10,000 in each of year 4 and \$3,000 in year 5. Based on the above data, what is payback period (non-discounted)?

Initial Cash Outlay = \$25,000

Cumulative Non-discounted Cash Inflow in \$ dollars

End of Year 1:	5,000
End of Year 2:	14,000
End of Year 3:	24,000
End of Year 4:	34,000

Payback Period (Non-discounted) = In between 3 years 1 month and 3 years 2 months

1	5000	5000		
2	9000	14000		
3	10000	24000		
4	10000	34000	833.3333	pm
5	3000	37000		
	3.1 year	24833.33		

4.3 Alternative Investment Criteria

An alternative investment is a financial asset that does not fall into one of the conventional investment categories. Conventional categories include stocks, bonds, and cash. The term is a relatively loose one and includes tangible assets such as precious metals, art, wine, antiques, coins, or stamps and some financial assets such as real estate, commodities, private equity, distressed securities, hedge funds, exchange funds, carbon credits, venture capital, film production, financial derivatives, and cryptocurrencies.

Investments in real estate, forestry and shipping are also often termed "alternative" despite the ancient use of such real assets to enhance and preserve wealth. In the last century, fancy color diamonds have emerged as an alternative investment class as well. Alternative investments are to be contrasted with traditional investments. Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of their complex nature, lack of regulation, and degree of risk.

The following are the five best alternative investment options. These are; tax Liens, Physical Real Estate (e.g. Farmland), Jewelry (Commodities) and Stamps.

Real estate focuses on land and improvements that are permanently affixed, like buildings. Land comprises a variety of forms, including undeveloped land, timberland, and farmland.

4.4 Cost of Capital

The cost of capital is a central concept in financial management. It is used for evaluating investment projects, for determining the capital structure, for assessing leasing proposals, for setting the rates that regulated organizations like electric utilities can charge to their customers, so on and so forth. From the viewpoint of investors, cost of capital is the reward of postponement of his present needs, so as to get a fair return on his investment in future. For the investor the cost of capital is determined by the conditions that can be obtained for the project on the capital market. For the amount stemming from own funds (savings) investors should charge their opportunity cost of capital, that is, the interest they would obtain if they invested in another feasible venture. But from the viewpoint of the company, the cost of capital refers to the financial burden that accompany has to bear in financing its business through various sources.

The concept of cost of capital helps in making financial decisions Specially, in case of capital budgeting, it is used as a decision criterion in capital decision. If the present value of cash follows of the project is greater than the present value of investment in it, the project would be accepted. The rate of discount that is

used to calculate the present value of future cash flows of the project is nothing but the cost of capital. Thus, cost of capital is the minimum rate of return required on investment projects. It is the rate of discount which is used to evaluate the profitability of an investment project. Thus, minimum rate of return of an investment project cut-off rate, target rate and hurdle rate are all synonyms used for the cost of capital.

The economic cost of capital is the value of that scarce capital if it was invested in the best alternative use. For instance, governments with limited resources could take a large loan to invest in agriculture, if they were likely to receive higher returns from the capital invested. The economic cost of investing that money in water and sanitation would therefore be the lost return they might have got from agriculture (minus the return they would actually get from water and sanitation).

The cost of capital is particularly relevant in the case of service providers, rural or urban, that operate more like utilities, with ongoing financial responsibilities for managing fixed assets, rather than as one-off project implementers. The ongoing challenge has always been to understand and report on the different aspects of the costs of investment in long-term assets, relative to the day-to-day costs of running or operating a system or activity. The cost of equity capital for the project or firm is basically determined by the minimum accumulated return, expressed as the NPV of the future income of the shareholders, and the minimum annual rate of return, expressed as the rate of return on equity capital. If the investment project is to be evaluated on the basis of an internal rate of return, the project will be acceptable when the internal rate of return exceeds the cost of capital.

4.5 Social Cost benefit analysis

It became important in late 1960s and early 1970s (Public Projects). Social Cost Benefit Analysis (SCBA) is a tool developed for evaluating projects from the society's point of view. Now a days it is also getting importance in private investment project as they have to be approved by different government agencies.

Social Cost Benefit Analysis is a methodology for evaluating projects from the social point of view and focuses on social cost and benefits of a project. It analyzes the social cost and total social benefits if we accept any project. In Social Cost Benefit Analysis (SCBA), we see whether return or benefits on this investment are more than its cost from point of view of society in which we are living. SCBA is concerned with tactical decision making within the framework of broad strategic choices defined by planning at the macro level.

SCBA considers the total impact that a project will have on an economy also taking into account the hidden factors. SCBA is a methodology for evaluating projects within the planning framework from social point of view. In SCBA the focus is on social costs and benefits of a project. These often tend to differ from the costs incurred in monetary terms and benefits earned in monetary terms by the project.

It comprises not just the financial effects (investment costs, direct benefits like tax and fees, et cetera), but all the social effects, like: pollution, safety, indirect (labour) market, legal aspects, et cetera. The main aim of a social cost-benefit analysis is to attach a price to as many effects as possible in order to uniformly weigh the above-mentioned heterogeneous effects. As a result, these prices reflect the value a society attaches to the caused effects, enabling the decision maker to form a statement about the net social welfare effects of a project.

Social cost–benefit analysis always involves judgements on accuracy of data, and the interpretation of data as shadow prices has to take into account the risks and uncertainty surrounding the future. Therefore, sensitivity tests are always needed. The need for sensitivity tests somewhat undermines the claim that social cost–benefit analysis ranks developmental activities on purely technical criteria.

In General, SCBA is a social decision-making machinery, which evaluate all major intangible costs and benefits arising from a contemplated course of action.

Need for SCBA?

Project may create certain infrastructure facilities like road which will benefit people in the nearby community.

A. Consider the Railway project:

The Railway projects might have the following social benefits and costs

Potential benefits:

- It reduces motor vehicles operation and maintenance cost to both government and private sector as they switch over from road to railways.
- It will reduce travel time of people using the road (opportunity cost of time)
- Reduce atmospheric pollution in the city
- Reduce investment and operation cost of road
- Reduce traffic accident in the city

Expected cost of the project

- Loss of revenue to private investor

- Number of people losing their job

B. Consider a development project - Construction of Dam.

These are benefits like,

- The number of unemployed people that would get employment opportunity
- Benefit obtained from the infrastructure improvement (saved time, reduced cost, etc.)
- Decrease yearly flood damage (soil erosion, reduced property damage)
- Recreational benefit to the society

Intangible Cost (harmful impact of the project)

- Deforestation created by the project
- Number of people displaced from the site

Chapter Five: Project Financing

Introduction

After projecting or estimating the cost of the proposed project, the next step is to identify means of financing the project. Finance may be defined as the provision of money at the time when it is required. It is also the management of flow of money through an organization.

Project financing reflects the sources of funds in order to start any new project or for the purposes of developing a large capital-intensive infrastructure project. Project financing is a specific financial arrangement for a selected project. Project financing typically used for funding public and private capital-intensive facilities and utilities. Such as opening of new company, subsidiary company, starting of new plant, it can be of infrastructure or it can be industrial project etc.

There is no project is offered 100% assistance even if the project is highly profitable since the institutions expect a minimum stake for the promoter to ensure his involvement.

Project financing is used to fund large scale resources to run the business. For the project financing, financial plan is the key element. On the basis of the financial plan companies get the project financing, in the financial plan companies have to design the financing mix and assess the risks and then raise the funds. Companies need to analyze the cash flow projections and find out the expected return and use different methods in order to check the feasibility of the project.

Project finance creates value by reducing the costs of funding, maintaining the sponsors financial flexibility, increasing the leverage ratios, avoiding contamination risk, reducing corporate taxes, improving risk management, and reducing the costs associated with market imperfections. However, project finance transactions are complex undertakings, they have higher costs of borrowing when compared to conventional financing and the negotiation of the financing and operating agreements is time-consuming.

5.1 Sources of Project Financing

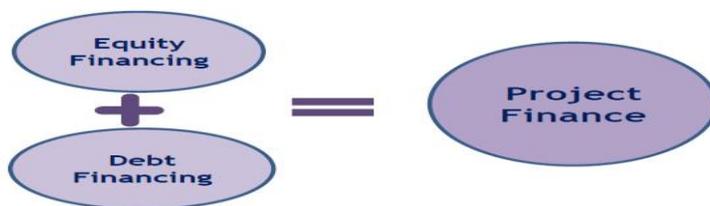
Sources of project financing reflects the sources of funds in order to start any new project. Funding can come from a variety of sources. Depending on qualifications, certain projects of a national development plan can be financed by foreign donors, international organizations or even corporate/non-profit partners. It also can liaise with various government agencies responsible for an area or industry included in a development plan. The funding issue will most likely be the most politically sensitive and will require

support from taxpayers and elected officials to advocate for funding in the budgeting process. Realistic resource forecasts should be considered before establishing a project because if funding dries up, cynicism may arise from voters.

Capital for financing of investments may be obtained from private and institutional resources (banks, insurance companies, funds etc.). To obtain finance, an investor must therefore pay a charge-the cost of capital or of finance-for the funds lent. This charge comprises an interest rate, usually expressed as a percentage per annum, as well as certain fixed charges (commitment fee, charge on capital not drawn, commissions etc.). There are basically two sources available for financing the fund requirement of a project internal sources and external source. For capital cost both intermediate and long-term finance are used in form of term loans, hire purchase, lease, fixed deposits, stocks (common and preferred) and debts.

✎ There are two sources of project finances:

- A. Equity Financing: - Money invested into your business in exchange for a share in its ownership.
- B. Debt Financing: - Debt financing is usually in the form of a loan where the principal amount borrowed and interest accumulated on the loan needs to be paid.



A. Equity Financing

Equity can be raised by issuing two types of shares: These are equity/ordinary /common shares and preference shares.

Equity shares represent contribution made by the owners of business the equity shareholders, who enjoy the rewards and bear the risk of ownership. Equity shares being risk capital carries no fixed rate of dividend. Equity and long-term investment are often used to cover the initial capital investment for an industrial project and to meet working capital requirements. Dividends on ordinary shares with full voting rights, however, depend on the profitable operation of the company

Preference shares represent the contributions made by preference shareholders and the dividend paid on it is generally fixed. Preference shares usually carry a dividend at least partly independent from profit, without, or with only limited, voting rights. Preference shares can be convertible to common shares,

B. Debt finance

There are a variety of debt finance products which can be applied in a project financing but the specific mix of products available to a project will depend on the sector, jurisdiction, project size, Sponsor profile, transaction risk profile and source of capital equipment. Because of the inherent benefits of leverage and tenor to a project's economics, Sponsors will invariably be drawn to the most liquid and long-term instruments available for a given project.

➤ The principle sources of debt finance for a limited Recourse, Greenfield project are:

1. Commercial bank loans: Although traditionally structured as syndicated loans with large initial underwrites, Sponsors now look to build clubs of banks for projects following the collapse of the syndicated loans market during the Global Financial Crisis. Commercial funding for projects can be sourced both from international and local banks.
2. Export credit agencies (ECAs): ECA finance was historically more relevant for financing projects in emerging markets due to the political risk cover obtained by commercial lenders utilising ECA cover. This picture has changed somewhat in the wake of the Global Financial Crisis (see below) and ECA finance is now a major source of global project lending. The majority of ECA financing is covered lending, where commercial banks.
3. Multilateral agencies: Multilateral agencies are established by intergovernmental agreements and unlike ECAs are independent of the interests of any single country member or recipient government – they are designed to promote international and regional economic co-operation. They can provide direct lending, political insurance to other lenders and even equity participation. Because they are developmental in nature, they are predominantly emerging markets focused and will seek a strong socio-economic developmental rationale for a project to consider support.

Foreign Financial Institutions

1. World Bank: It is also the International Bank for Reconstruction and Development. World Bank funds to the less developed member countries for building infrastructure. Schools, irrigation dams,

power plants, roads, water supply and sewerage, etc. are the specific projects, which have been aided by the World Bank.

2. International Monetary Fund (IMF) This is a part of the United Nations. It complements the World Bank's efforts to promote economic growth.
3. International Finance Corporation (IFC) It is a subsidiary of the World Bank and provides funds specifically for the private sector.
4. International Development Association (IDA) This is also a subsidiary of the World Bank. It provides soft loans to under-developed countries.
5. United Nations Development Programme (UNDP) and United Nations Industrial Development Organization (UNIDO) These two institutions of the United Nations provide funds to industrial projects throughout the world.
6. Asian Development Bank (ADB) This is the development bank for the Asian continent. This institution finances infrastructure projects and also new industrial units.

Where relatively inexpensive long- or medium-term credit is available, there is a growing tendency to finance projects through such loans. In many countries it is relatively easy for a sound project to get loans from financial institutions. The financial analysis will identify such sources and the extent to which loan capital can be secured, (with the interest rate). The limits to which inventories are financed by commercial banks are fixed by the banks, and depend on banking practices in the country, the nature of the project and inventories, and the credit rating of the enterprise and its management

- **Short-term loans:** - Short-term loans from commercial banks and local financial institutions are available against pledging, of inventories.
- **Long term loans:** - Long term loans (5 to 10 years) are provided by financial institutions and commercial banks.

Terms loan represent secured borrowing, which are very important source (major source) for financing new project as well as expansion, modernizing and renovation schemes of exiting firms.

5.2 Key Principles in fund raising

Remember that fundraising is simply getting people to be supportive of your arts organization. You do that through personal contact and by educating and involving them. The following are truths you should incorporate into whatever fundraising you do:

- ☞ Never ask a stranger for money
- ☞ Think of the needs of the donor
- ☞ Ask for support for what you need
- ☞ Personalize your solicitation
- ☞ Raise money from the inside out
- ☞ Raise money from the top down
- ☞ Make the case larger than the organization
- ☞ Develop a strategy you can accomplish
- ☞ Treasure your volunteer leadership

5.3 Ethics in Fund Raising

Ethics is a moral principle that govern a person's behavior or the conducting of an activity. Ethics provides us with a moral map, a framework that we can use to find our way through difficult issues. Ethics can eliminate confusion and clarify the issues. After that it's up to each individual to come to their own conclusions.

Fundraisers work in many varied fields, countries and circumstances, but they share several fundamental values and practices: they work to make the difference, help others and save what is valuable, in fact to make the world a better place. It is for these reasons that fundraisers strive to identify and employ best practices.

1. Honesty: Fundraisers will always be honest and truthful, upholding public trust and never misleading supporters or the public.
2. Respect: Fundraisers will always be respectful of our beneficiaries and donors, following their choices and wishes, wherever possible.
3. Integrity: Fundraisers will always act with integrity, following legislative and regulatory requirements, and will always work for the best interests of our causes and supporters
4. Transparency: Fundraisers will always be transparent, clear and accurate about the work of our causes, how donations will be managed and spent, and report on costs and impact accurately.

5. Responsibility: Fundraisers will always act responsibly, understanding that we share a common objective to promote fundraising excellence for the benefit of the common good. We value and encourage diversity in our practice and our fundraisers, and continually seek to develop our professional standards

5.4 Financial management

Financial management refers to the strategic planning, organizing, directing, and controlling of financial undertakings in an organization or an institute. It also includes applying management principles to the financial assets of an organization, while also playing an important part in fiscal management. Take a look at the objectives involved:

- ✓ maintaining enough supply of funds for the organization;
- ✓ Ensuring shareholders of the organization to get good returns on their investment;
- ✓ Optimum and efficient utilization of funds;
- ✓ Creating real and safe investment opportunities to invest in.

Financial management is defined as dealing with and analyzing money and investments for a person or a business to help make business decisions. Financial management is one of the most important aspects in business. In order to start up or even run a successful business, you will need excellent knowledge in financial management.

Why is Financial Management important?

This form of management is important for various reasons. Take a look at some of these reasons:

- ❖ Helps organizations in financial planning;
- ❖ Assists organizations in the planning and acquisition of funds;
- ❖ Helps organizations in effectively utilizing and allocating the funds received or acquired;
- ❖ Assists organizations in making critical financial decisions;
- ❖ Helps in improving the profitability of organizations;
- ❖ Increases the overall value of the firms or organizations;
- ❖ Provides economic stability

Chapter Six: Project Management Information System (PMIS)

Introduction

PMIS technology and systems have increased dramatically in popularity, use, and interest over the past decade. Today, organizations and groups of all types, as well as individuals, use PMIS for a wide variety of spatial data activities.

However, while PMIS can be very useful to organizations and individuals, their effectiveness and success depends upon how well they are planned, implemented, managed, and used.

The project management needs a modern management system within the project and the organization. This new and modern system that is achieved using integrated tools of project management information system.

The duty of project management information system includes collecting, processing and refining raw data of the project and creating a basic analyzed database required by management at all levels. Using this information over the time and by accomplishment of several projects, organizational knowledge will be created. Alongside these duties, facilitating the affairs of the project is considered as another duty of such systems.

6.1 The meaning of project management information system (PMIS)

A project management information system (PMIS) is the systematic process of creating, identifying, collecting, organizing, sharing, adapting and using project information.

According to PMBOK, PMIS is an information system that utilizes tools and methods to collect, integrate and present outputs of project management processes. Project management information system can be utilizing to support all aspects of the project from start to end and can include both manual and automatic systems.

A project management information system is an integrated set of mutually supporting tools, processes and methods for managing project information; applied in a consistent way to support the decision making and information needs of stakeholders'

Project management information system is based on the log frame as the framework from which all information will be organized. It is from the log frame that the project management information system can connect project objectives with project activities and measure impact and progress, but most important it

keeps the relationship between outputs and impact in a way that project managers can evaluate the contribution of the outputs to the objectives of the project. Projects need logical information systems that maintain and strengthen the project, as well as meeting the needs of many other kinds of information users, including the target population. Projects are most often used in information technology (IT), software development, business process reorganization and research and development.

Projects must create an information system that will meet their own particular needs, both for managing the data they collect and for delivering information to different groups of users in formats they can understand and make use of. In order to develop such information systems, it is important to have strong support from decision makers. It is therefore very important to make decision makers aware that an information system is a priority tool for project resources governance.

6.2 Characteristics of project Management information system (PMIS)

In order to have flexible and responsive interventions, a project information system needs to be more than just a reporting mechanism. It must serve as a powerful management tool for advancing an organization's program me goals of accountability, transparency and partnership.

A good project management information system needs to contain the following characteristics:

- ☞ A PMIS Software supports all Project management knowledge areas such as: Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management, and Project Stakeholders Management.
- ☞ A PMIS Software is a multi-user application, and can be cloud based or hosted on-premise.
- ☞ Relevance of information
- ☞ Completeness of information
- ☞ Accuracy and reliability of information
- ☞ Usefulness of information
- ☞ Timelines of information

6.3 Application of project management information system in GeES

Project management information system and the project have their own interaction on each other and while system provides information about the project and affects the structure, culture and other parts of the project through the election of a new information system, the project needs also influence the design of system so that the project can benefits form new advantages of system. In fact, managers decide what and how a system should be established so that they could achieve what they want with regard to structure, politics, culture, project environment and management decisions.

Not too long ago, managers recognized information as a costly phenomenon, but now appropriate information systems provide timely and reliable information in appropriate forms and regular reports to assist managers in decision making process. Therefore, these systems should not be viewed as a costly phenomenon but rather as a part of the company's capital. From management perspective, these systems offer solutions to environmental problems using the assistance of technical information.

Future is not where we go, but is the where we make it through the path toward the future. National advantage appears in countries that managers do not only seeking to increase efficiency, but their organizational movement is in line with overall strategy.

Undoubtedly, in the third millennium that the role of information and communication technologies and ever-increasing use of them in business and projects with the aim of responding to the needs of the changing environment and the need for correct and timely decisions seems more significant, it can be predicted that this may change many business circumstances.

Therefore, cost in management perspective is irrelevant and useless information that its side effects can even mislead managers in decision making; and related, accurate, timely, reliable information are as a part of project capital in management views that helps managers in making efficient and effective decisions. Since information itself is a factor of power to manage, so a powerful and capable manager is a person who has accurate and real-time information of environmental phenomena and take the advantages of such devices in order to achieve optimal organizational goals.

Considering this, PMIS is the official method of preparing accurate and timely information to facilitate manager's decision-making process during planning, control and taking effective and efficient decision for the project.

Likewise, a good information system could lead to a better and more reasonable relationship to exchange information, reduces the redundant administrative tasks through eliminating unnecessary operations, accelerates the performance of different sections, eliminates the need for rewriting projects data in different sectors, and provides better control in the project. Indeed, facilitating the project is considered as the importance and necessity of PMIS.

PMIS brings accurate and relevant information to management within the required time frame and helps to speed up the decision-making process and any action necessary to ensure that the project is on track in terms of time, budget and objective.

Chapter seven: Monitoring and Evaluation

Introduction

Monitoring and evaluation (M&E) are integral and individually distinct parts of project and programme preparation and implementation. Monitoring and evaluation are an embedded concept and constitutive part of every project or programme design (“must be”). It is ideally understood as dialogue on development and its progress between all stakeholders. To ensure the success of these projects organizations are investing in Project Management Information Systems (PMIS) to assist project managers and the project team in the management and undertaking of the project activities.

7.1 Introduction to Project Monitoring and Evaluation

Monitoring and evaluation (M&E) are the combination of monitoring and evaluation which together provide the knowledge required for: a) effective project management and b) reporting and accountability responsibilities

Monitoring and evaluation are a process of continual gathering of information and assessment of it in order to determine whether progress is being made towards pre-specified goals and objectives, and to highlight whether there are any unintended (positive or negative) effects from a project and its activities. It is an integral part of the project cycle and of good management practice.

Monitoring and evaluation (M&E) are integral and individually distinct parts of programme preparation and implementation. They are critical tools for forward-looking strategic positioning, organizational learning and for sound management.

Monitoring and evaluation are the processes that allow policy-makers and programme managers to assess: how an intervention evolves over time (monitoring); how effectively a programme was implemented and whether there are gaps between the planned and achieved results (evaluation); and whether the changes in well-being are due to the programme and to the programme alone (impact evaluation).

At project level monitoring and evaluation can:

- ☞ provide regular feedback on project performance and show any need for ‘mid-course’ corrections
- ☞ identify problems early and propose solutions
- ☞ monitor access to project services and outcomes by the target population;

- ☞ evaluate achievement of project objectives
- ☞ measure the impact of the project on various indicators (including those relating to project objectives and other areas of concern)
- ☞ incorporate stakeholder views and promote participation, ownership and accountability.

Generally, the concept of project Monitoring and Evaluation are used in many ways. We can think of M&E as a part of continuous observation, information gathering, supervision (control) and assessment.

The standard criteria for assessing the quality of your M&E are:

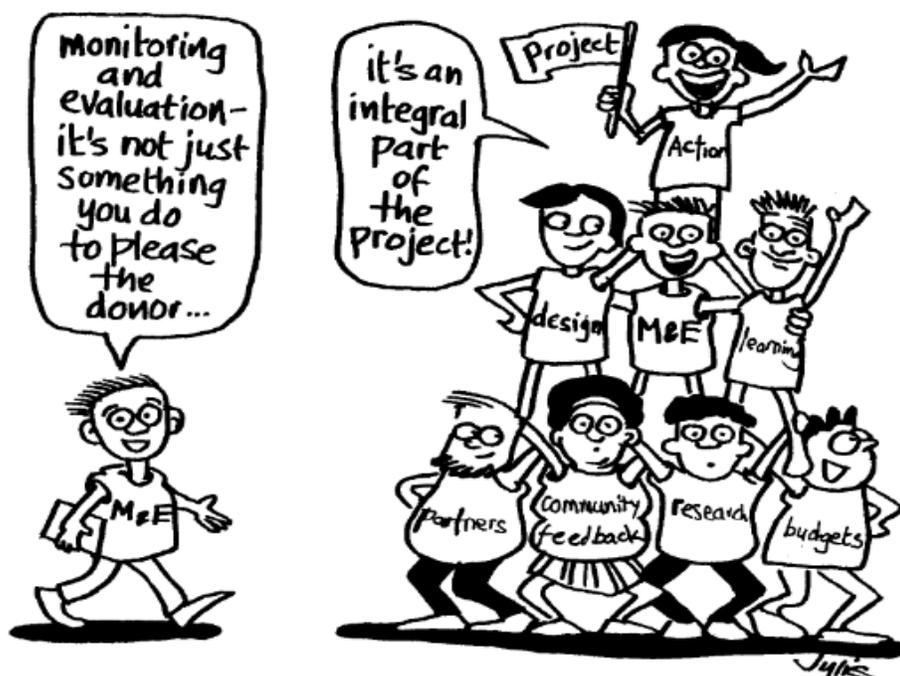
- ☞ Utility – the M&E system will serve the practical information needs of intended users.
- ☞ Feasibility - the methods, sequences, timing and processing procedures proposed are realistic, prudent and cost effective;
- ☞ Propriety - the M&E activities will be conducted legally, ethically and with due regard for the welfare of those affected by its results.
- ☞ Accuracy – the M&E outputs will reveal and convey technically adequate information.

The Need for Monitoring and Evaluation

There are many reasons for carrying out project M&E

- ☞ Project managers and other stakeholders need to know to what extent their project is meeting its objectives
- ☞ M&E build greater transparency and accountability in terms of use of project resources
- ☞ Information generated through M&E provide project staff with a clearer basis for decision-making
- ☞ Future project planning and development is improved when guided by lessons learned from project experience
- ☞ It provides the only consolidated source of information showcasing project progress;
- ☞ It allows educators to learn from each other's experiences, building on expertise and knowledge;
- ☞ It often generates (written) reports that contribute to transparency and accountability, and allows for lessons to be shared more easily;
- ☞ It reveals mistakes and offers paths for learning and improvements;
- ☞ It provides a basis for questioning and testing assumptions;
- ☞ It provides a means for educators seeking to learn from each other's experiences and to incorporate them into policy and practice;

- It provides a way to assess the crucial link between implementers and beneficiaries on the ground and decision-makers;



Taken from IFRC Project/Programme M&E Guide
<http://www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf>

	What?	Why?
Monitoring	Ongoing gathering (and analysis) of information/data (usually against targets and milestones)	Document results, processes and experiences and track progress as a basis for steering decisions and identifying issues early on to take corrective action.
Evaluation	Assessing data and information to establish a judgement on the success of a project. <ul style="list-style-type: none"> - <i>Formative</i> - <i>Summative</i> 	To assess whether a project has achieved its intended goals/impact. But evaluation is not just for accountability reasons, but also learning to feed into future decisions

Monitoring is a continuous process, whereas evaluations are carried out at specific points of time in the course of the project (mostly at the end of the project or a project phase).

A. Monitoring

Monitoring is a continuous process of gathering, analyzing and interpreting of information of the daily use of inputs and their conversion into outputs. Project evaluation represents a systematic and objective assessment of ongoing or completed projects in terms of their design, implementation and results.

Monitoring represents an on-going activity to track project progress against planned tasks. Monitoring implies observing and controlling the project's activities. As soon as the project is launched, control or monitoring becomes the dominant concern of the project management.

Monitoring is the regular collection and analysis of information to assist timely decision-making ensure accountability and provide the basis for evaluation and learning. It is a continuing function that uses methodical collection of data to provide management and the main stakeholders of an ongoing project or programme with early indications of progress and achievement of objectives.

Project monitoring is an integral part of day-to-day management. Its purpose is to provide the information by which management can identify and solve implementation problems, and assess progress in relation to what was originally planned.

Monitoring is the routine checking of information on progress, so as to confirm that progress is occurring against the defined direction. It commonly involves monthly to quarterly reporting, on outputs, activities and use of resources (e.g. people, time, money, and materials). It should be used to ensure that what has been planned is going forward as intended and within the resources allocated.

The goal of monitoring

- ✎ To ensure that the implementation is proceeding as per the plan
- ✎ To provide records of input use, activities and results
- ✎ To warn of deviation from the initial objective
- ✎ Any significant departures from the budget and the schedule must be reported immediately,
- ✎ This will help the project manager to adapt the project schedule, the budget and/or the work plan to keep the project on track.
- ✎ The project progress and changes must be documented and communicated to the team members in a consistent, reliable and appropriate manner.

What should be monitored?

- a regular comparison of performance against target
- Quality of work being completed
- Costs and expenditures compared to the plan
- Attitudes of people working on the project and others who are involved with the project,
- Cohesiveness and co-operation of team members

In general, project manager must compare the time, cost and performance of the project with the budget, time and the tasks defined in the approved project plan. This must be done in an integrated manner at regular intervals, not in a haphazard, arbitrary way.

B. Evaluation

Evaluation is the periodic assessment of the design, implementation, outcomes a project's relevance, performance, efficiency, and impact in relation to stated objectives. As with monitoring, evaluation benefits from the process of information gathering to facilitate the assessment of the extent at which the project is achieving or has achieved its expected goals. Its findings allow project managers, beneficiaries, partners, donors and all project stakeholders to learn from the experience and improve future interventions. It should assess the relevance and achievement of objectives, implementation performance in terms of effectiveness and efficiency, and the nature, distribution and sustainability of impacts.

Project evaluation represents a systematic and objective assessment of ongoing or completed projects in terms of their design, implementation and results. In addition, evaluations usually deal with strategic issues such as

- ✓ project relevance,
- ✓ effectiveness,
- ✓ efficiency in the light of specified objectives,
- ✓ Project impact and sustainability.

Evaluation is used to ensure that the direction chosen is correct, and that the right mix of strategies and resources were used to get there. It can typically be formative (helping to develop learning and understanding within stakeholders) or summative (i.e indicating the degree of achievement). It typically focuses on outcomes and their relationship with outputs

7.2 Types of Project Monitoring

There are many different types of monitoring. Some of the most common types are described below. However, these are known by different names in different organizations.

A. Process or performance monitoring focuses on the activities carried out as part of a development intervention. It is designed to assess whether and/or how well those activities are being implemented. It also covers the use of resources. Process monitoring is designed to provide the information needed to continually plan and review work, assess the success or otherwise of the implementation of projects and programmes, identify and deal with problems and challenges, and take advantage of opportunities as they arise.

It measures progress in achieving specific objectives and results in relation to an implementation plan whether for programmes, projects, strategies, and activities

B. Results or impact monitoring aims to assess the changes brought about by a project or programme on a continuous basis. Often this means assessing changes in a target population (e.g. individuals, communities, supported organisations, targeted decision-makers). Impact monitoring can be used to assess progress towards goals and objectives, as well as unintended change. Despite the name, impact monitoring is more often associated with changes at outcome, rather than impact, level.

C. Beneficiary monitoring, or beneficiary contact monitoring, is a specific type of impact monitoring that aims to track the perceptions of project or programme beneficiaries (IFRC 2011). It can include beneficiary feedback mechanisms and beneficiary complaints mechanisms. Beneficiary monitoring can be seen as a specific type of participatory monitoring and evaluation (M&E).

D. Situation monitoring, sometimes known as scanning, is concerned with monitoring the external environment. Sometimes this is done through defining and collecting indicators relating to issues such as the local political situation, changes in the economy, and the activities of other development actors. At other times, situation monitoring simply means keeping eyes and ears open in order to assess what is happening outside of a project or programme that might influence it.

E. Financial monitoring is concerned with the monitoring of budgets and finance, and is linked to auditing. It is usually concerned with tracking costs against defined categories of expenditure.

- F. Administrative or logistics monitoring covers issues such as the maintenance of premises, transport, personnel, stock-keeping, and other forms of administration.
- G. Compliance monitoring is designed to ensure compliance with issues such as donor regulations, grant or contract requirements, government regulations, and ethical standards.

7.3 Levels of Monitoring

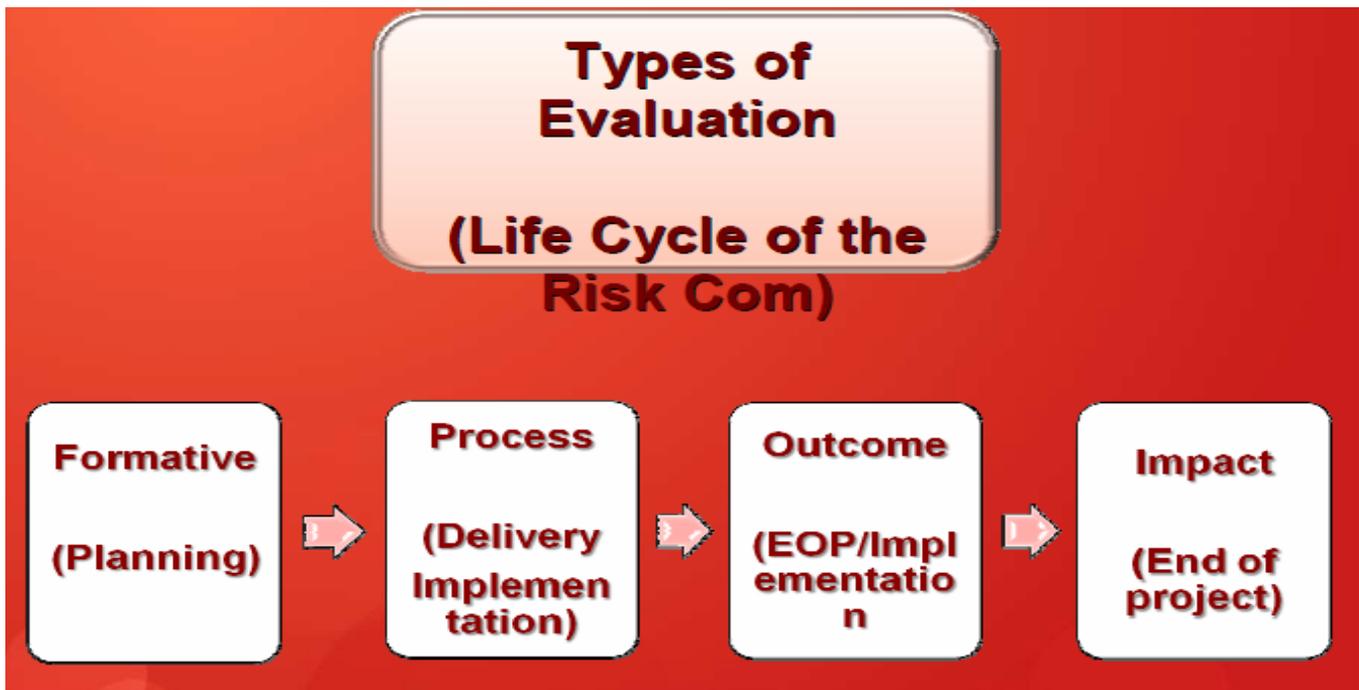
Monitoring the project can happen at different levels. These are

- A. The activities implemented (process)
 - ✎ Do activities occur with the planned frequency, with the planned intensity, with the appropriate timing, and as directed to reach the intended audience?
- B. The effectiveness of the activities (performance)
 - ✎ Focus on quality, quantity and distribution of communication out puts
- C. Outcomes
 - ✎ Focus on the outcomes of the project activities contribute to.
- D. Impact
 - ✎ Was the project strategy useful in making progress towards the goal?

7.4 Types of Evaluation

Many types of evaluation exist, consequently evaluation methods need to be customized according to what is being evaluated and the purpose of the evaluation. The main types of evaluation are formative, process, impact, outcome and summative evaluation.

- ✎ The categorization is based on five criteria (see ActionAid (2016), based on IFRC (2011)). The criteria are:
 1. the purpose of the evaluation;
 2. who conducts the evaluation;
 3. when the evaluation is carried out;
 4. the general approach used; and
 5. cross-cutting themes.



❶ Formative Evaluation

Formative evaluation ensures that a program or program activity is feasible, appropriate, and acceptable before it is fully implemented. It is usually conducted when a new program or activity is being developed or when an existing one is being adapted or modified.

- ✎ undertaken during the planning stage
- ✎ assesses the strengths and weaknesses of materials, strategies
- ✎ permits necessary revisions before full Implementation

❷ Process Evaluation

Process/implementation evaluation determines whether program activities have been implemented as intended.

Process evaluation is used to “measure the activities of the project and project quality. It examines procedures and tasks (measures of efforts). It permits a good look at how well activities are being conducted. Process Evaluation determines whether program activities have been implemented as intended and resulted in certain outputs.

It helps to answer the questions about your project such as:

- Has the project reached the target group?
- Are all project activities reaching all parts of the target group?
- Are participants and other key stakeholders satisfied with all aspects of the project?
- Are all activities being implemented as intended? If not why?
- What if any changes have been made to intended activities?
- Are all materials, information and presentations suitable for the target audience?

③ Outcome Evaluation

Outcome/effectiveness evaluation measures program effects in the target population by assessing the progress in the outcomes or outcome objectives that the program is to achieve. Outcome Evaluation measures program effects in the target population by assessing the progress in the outcomes that the program is to address. Outcome evaluation is concerned with the long-term effects of the program and is generally used to measure the program goal. Consequently, outcome evaluation measures how well the program goal has been achieved.

Outcome evaluation will help answer questions such as:

- ✚ Has the overall program goal been achieved?
- ✚ What, if any factors outside the program have contributed or hindered the desired change?
- ✚ What, if any unintended change has occurred as a result of the program?

Outcome evaluation measures changes at least six months after the implementation of the project (longer term). Although outcome evaluation measures the goal of the project, it can also be used to assess project objectives over time.

④ Impact Evaluation

Impact evaluation assesses program effectiveness in achieving its ultimate goals. Impact evaluation is used to measure the immediate effect of the project and is aligned with the project objectives. Impact evaluation measures how well the project objectives (and sub-objectives) have been achieved. Impact evaluation measures the program effectiveness immediate after the completion of the project and up to six months after the completion of the project.

Impact evaluation will help answer questions such as:

- How well has the project achieved its objectives (and sub-objectives)?

- How well have the desired short-term changes been achieved?

For example, one of the objectives of the My-Peer project is to provide a safe space and learning environment for young people, without fear of judgment, misunderstanding, harassment or abuse. Impact evaluation will assess the attitudes of young people towards the learning environment and how they perceived it. It may also assess changes in participants' self-esteem, confidence and social connectedness.

⑤ Summative evaluation

At the completion of the program it may also be valuable to conduct summative evaluation. This considers the entire project cycle and assists in decisions such as:

- ✎ Do you continue the program?
- ✎ If so, do you continue it in its entirety?
- ✎ Is it possible to implement the program in other settings?
- ✎ How sustainable is the program?
- ✎ What elements could have helped or hindered the program?

Evaluation Types	When to use	What it shows	Why it is useful
Formative Evaluation Evaluability Assessment Needs Assessment	<ul style="list-style-type: none"> • During the development of a new program. • When an existing program is being modified or is being used in a new setting or with a new population. 	<ul style="list-style-type: none"> • Whether the proposed program elements are likely to be needed, understood, and accepted by the population you want to reach. • The extent to which an evaluation is possible, based on the goals and objectives. 	<ul style="list-style-type: none"> • It allows for modifications to be made to the plan before full implementation begins. • Maximizes the likelihood that the program will succeed.
Process Evaluation Program Monitoring	<ul style="list-style-type: none"> • As soon as program implementation begins. • During operation of an existing program. 	<ul style="list-style-type: none"> • How well the program is working. • The extent to which the program is being implemented as designed. • Whether the program is accessible and acceptable to its target population. 	<ul style="list-style-type: none"> • Provides an early warning for any problems that may occur. • Allows programs to monitor how well their program plans and activities are working.
Outcome Evaluation Objectives-Based Evaluation	<ul style="list-style-type: none"> • After the program has made contact with at least one person or group in the target population. 	<ul style="list-style-type: none"> • The degree to which the program is having an effect on the target population's behaviors. 	<ul style="list-style-type: none"> • Tells whether the program is being effective in meeting its objectives.
Economic Evaluation: Cost Analysis, Cost-Effectiveness Evaluation, Cost-Benefit Analysis, Cost-Utility Analysis	<ul style="list-style-type: none"> • At the beginning of a program. • During the operation of an existing program. 	<ul style="list-style-type: none"> • What resources are being used in a program and their costs (direct and indirect) compared to outcomes. 	<ul style="list-style-type: none"> • Provides program managers and funders a way to assess cost relative to effects. "How much bang for your buck."
Impact Evaluation	<ul style="list-style-type: none"> • During the operation of an existing program at appropriate intervals. • At the end of a program. 	<ul style="list-style-type: none"> • The degree to which the program meets its ultimate goal on an overall rate of STD transmission (how much has program X decreased the morbidity of an STD beyond the study population). 	<ul style="list-style-type: none"> • Provides evidence for use in policy and funding decisions.

It is important to note the usefulness of conducting process evaluation while you are implementing outcome evaluation. If the outcome evaluation shows that the program did not produce the expected results, it may be due to program implementation issues. Therefore, it is recommended that if you conduct outcome evaluation, you also implement process evaluation.

7.5 Data collection for monitoring and Evaluation

Once we have decided on the type of data we want to monitor, the next question is how to collect these data and turn them into information useful for controlling the project. This is the activity of data collection and reporting. In this section we cover the physical collection of data and the analysis of that data, if necessary, to transform them into information. Once transformed, however, there are many ways to present the information and these are covered under the topic of reporting, including a discussion of the three main types of reports. A very special means of both collecting and disseminating data, and even sometimes information, is the proverbial “meeting, “and we offer some advice for this often-painful phenomenon both in-person and virtual meetings are included. The use of electronic means for distributing information or reports is briefly examined. At some point we have to decide what data we need to collect and precisely how to go about collecting them.

Before writing a proposal

- Interview past and prospective beneficiaries. Though feedback was likely received when the previous project ended, new benefits and conditions may have arisen since that time. Speak to prospective beneficiaries to ensure that what you are planning to offer is desired and needed.
- Review past project proposals. Avoid repeating mistakes and offering to reproduce results that have already been achieved. Donors will be unlikely to provide more funding for something that should already have been done.
- Review past project evaluation reports. Don't count on project members to remember all the mistakes and areas for improvement from previous efforts.
- Organize focus groups. Make sure that the people you need are willing and able to contribute.
- Check statistical data. Don't let others discover gaps and inaccuracies in the data you are relying on.
- Consult experts. Outside opinions will give you ideas and credibility.
- Conduct surveys, etc. Gather as much preliminary information as possible to demonstrate commitment to the project and to refine the objectives.

■ Hold community meetings or forums. When the public feels that they have been consulted on an issue, they will be much more likely to cooperate and support the project.

7.6 Project proposal writing

Without direct project funding, most non-governmental organizations (NGOs) would not be able to accomplish their goals. Writing clear, thorough and targeted project proposals is therefore essential to an NGO's success. Mastering the art of proposal writing requires a unified approach to project management. This guide is therefore intended to serve as a basis for delivering training sessions related to the process, as well as the end product of project design.

A project proposal is a detailed description of a series of activities aimed at solving a certain problem. The proposal should contain a detailed explanation of the:

- justification of the project
- activities and implementation timeline;
- methodology; and
- human, material and financial resources required.

The project proposal should be a detailed and directed manifestation of the project design. It is a means of presenting the project to the outside world in a format that is immediately recognized and accepted.

The project design is one phase of the project cycle. It consists of two elements:

- project planning (formulation of project elements); and
- project proposal writing (converting the plan into a project document).

Project proposal writing include the following elements.

1. Title page

The title page should contain, neatly arranged, the following:

- ✓ title of the project
- ✓ project registration number of the project
- ✓ name(s) of the author(s)
- ✓ name of the faculty advisor(s)
- ✓ name of off-campus sponsor, if any

- ✓ date of submission

2. Project title

The project title should be short, concise, and preferably refer to a certain key project result or the leading project activity. Project titles that are too long or too general fail to give the reader an effective snapshot of what is inside.

3. Contents page

If the total project proposal is longer than 10 pages it is helpful to include a table of contents at the start or end of the document. The contents page enables readers to quickly find relevant parts of the document. It should contain the title and beginning page number of each section of the proposal.

4. Abstract

The abstract should be a brief statement of the topic, procedure, and the projected outcome of the project, in three or four sentences. The abstract of the final report (which can be modified from the one in the proposal) is crucial since it goes on your transcript and is circulated widely off-campus. (The final project report abstract should be about 80 words to accommodate the space on your transcript. You will want to make this as good as possible since project abstracts are a major source job interviewer use to formulate questions.)

A three-sentence abstract might well follow this order.

1. First sentence introduces the project topic, mentioning (if relevant) the off-campus agency with whom the project is being done.
2. Second sentence indicates what material will be examined and procedures employed to carry out the project.
3. Third sentence indicates the anticipated conclusions (or results, application, or real world use of the project).

Many readers lack the time needed to read the whole project proposal. It is therefore useful to insert a short project summary as an abstract. The abstract should include:

- the problem statement;
- the project's objectives;
- implementing organizations;

- key project activities; and
- the total project budgets.

For a small project the abstract may not be longer than 10 lines. Bigger projects often provide abstracts as long as two pages.

5. Table of content

The table of contents lists (with final page numbers) the location of each separately titled section of the report, usually following the sequence above from abstract through appendices. To the professional reader (who as such is faced with lots of reading and appreciates conveniences), the table of contents also indicates at a glance what material is covered.

6. Project description

Rationale should be provided for the project. Due to its importance usually, this section is divided into four or more sub-sections.

A. Problem statement

The problem statement provides a description of the specific problem(s) the project is trying to solve, in order to “make a case” for the project. Furthermore, the project proposal should point out why a certain issue is a problem for the community or society as a whole, i.e. what negative implications affect the target group. There should also be an explanation of the needs of the target group that appear as a direct consequence of the described problem.

B. Rational- List the importance of the project.

For Example: Consider a development project - **Construction of Dam.**

- The number of unemployed people that would get employment opportunity
- Decrease yearly flood damage (soil erosion, deforestation, reduced property damage)
- Recreational benefit to the society

Example 2: **Consider the Railway project:**

- reduces motor vehicles operation and maintenance cost to both government and private sector as they switch over from road to railways.
- Reduce atmospheric pollution in the city
- Reduce traffic accident in the city

C. Project Goal

Put clearly the main goal and specific goals of the project.

The objectives should address the core problem in terms of the benefits to be received by the project beneficiaries or target group as a direct result of the project. Project objectives provide a more detailed breakdown of the project goal. A project will likely have multiple objectives.

General goal such as, improving the water supply in quantity X and quality Y for the population of village Z;

E. Project Activities-List all activities of the project

F. Target Beneficiaries -Direct and indirect beneficiaries by the project

G. Risk and Assumptions

e.g. The project will be a failure if the communities will not fulfil their contribution in form of bricks, sand, land and water. However, the chiefs, Village Area Committees and Village Development Committees have already started mobilizing communities to contribute the resources.

- ☞ We assume that the communities know their problem and that development comes from within the community. This will contribute to the success of the project.

7. The implementing organization

This section should describe the capabilities of your organization by referring to its capacity and previous project record. Describe why exactly your organization is the most appropriate to run the project, its connection to the local community, the constituency behind the organization and what kind of expertise the organization can provide. If other partners are involved in implementation provide some information on their capacity as well.

8. The proposed approach (type of intervention)

The project proposal should describe the strategy chosen for solving the problem and precisely how it will lead to improvement.

9. Project outcomes/Results

Results describe the services or products to be delivered to the intended beneficiaries. This is what the project management is promising to deliver. The results are more detailed than the objectives and the goal, and should be possible to measure through the use of objective indicators. Special consideration should therefore be paid to this area. The results should address the main causes of the problem that the target group faces.

- To ensure relevant results, project management should have correctly identified the group's needs.
- ➡ Relating back to the previous example, the results would be written as:
 - ☞ increased number of households connected to the water supply system; and
 - ☞ increased number of water taps in the village.

10. Budget- the amount of dollar or Birr to run the project.

11. References

References usually consist of footnotes and a bibliography. Footnotes may appear a) at the bottom of the page, b) at the end of the chapters, or c) at the end of the report but before the appendices. Footnotes usually cite appropriate sources of information (including interviews or verbal contributions from others) or occasionally indicate cross-reference to additional material. The form of the note varies with the professional area concerned, so check with your advisor. The standard for such matters is the latest edition of Kate Turabian's *A Manual For Writers*. Whatever the format, footnotes contain the name(s) of the author(s).