<u>Chapter One:</u> <u>Introduction to Project</u>

1.1. Basic concept of Project

- **Project is** a set of activities linked by a common goal/objectives that are sector and geographic specific.
- A project is a set of proposals for the *investment of resources* into a clearly identified set of actions that are expected to produce future benefits.
- A project is an investment activity in which *financial resources* are expended to create *capital assets* that produce benefits over an extended period of time, which logically seems to lend itself to planning, financing, and implementing as a unit.

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- It should have a well-defined sequence of investment and production *activities* and a specific group of *beneficiaries* that can be *identified, quantified, and determined* a money value for
- The *whole program* might possibly be analyzed as a *single project;* but, by and large, it is better to keep projects rather *small, close to the minimum size* that is economically, technically, and administratively *feasible*.
- There should be also a specific clients in the area whom the **project** is intended to reach and who's traditional social pattern the project will affect.

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- During a project's life management focuses on three basic parameters: **quality, cost, and time**.
- A successfully managed project is one that is completed at the *specified level of quality*; <u>on or before the</u> deadline; and <u>within</u> the budget.
- In addition, <u>client satisfaction</u> indicates success and possibility for replication or sustainability. Each of the parameters is specified in detail during the planning phase of the project.

Characteristics of a Project

- **Objectives**: A project has a set of objectives or a mission. Once the objectives are achieved the project is treated as completed.
- Life cycle: The life cycle consists of four stages i.e. Initial Phase, Planning Phase, Implementation Phase, and Completion phase.
- Uniqueness: All projects stem from new ideas. They provide a specific response to a need (problem) in a specific context.
- **Projects are collective:** They are run by teams, involve various partners and cater for the needs of others.
- **Complexity:** A project is a complex set of activities relating to diverse areas
- Risk and uncertainty: Risk and uncertainty go hand in hand with project.

- Customer specific nature: A project is always customer specific. It is the customer who decides upon the product to be produced or service
- Change: Changes occur throughout the life span of a project as a natural outcome of many environmental factors
- Sub-contracting: A high level of work in a project is done through contractors
- Unity in diversity: A project is a complex set of thousands of varieties
- **Projects have a purpose:** A project is result-oriented when project partners agree what they will achieve (change) together, where (area) and for whom (target groups).
- A project has to be sustainable :Sustainability is the continuation of benefits from a development intervention after major development assistance has been completed.

The core elements of sustainability are:

- **Social sustainability** impact on working conditions, compliance with international labor standards, social protection, etc.
- **Financial sustainability** financing of follow-up activities, sources of revenue for all future operating and maintenance costs, etc.;
- **Institutional sustainability** structures that allow the results of the action to continue. Consider local "ownership" of outcomes;
- Environmental sustainability impact on the environment.

Avoid negative effects on natural resources and on the broader environment.

The linkage between projects and programs

a project refers to an investment activity where resources are used to create capital assets, which produce benefits over time and has a beginning and an end with specific objectives, while a program is an ongoing development effort or plan which may not necessarily be time bounded.

- Examples could be a road development program, a health improvement program, a nutritional improvement program, a rural electrification program.
- Programs may include elements or related work *outside the scope* of discrete projects in the program

- the major difference between a project and a program is not so much in objectives stated but lies more in scope, the details and accuracy.
- A project is designed with a high degree of precision and details as regards its objectives, features, calculation of returns and implementation plan.
- A program by contrast is general, lacks details and precision and aims at a broader goal often related to a sectoral policy of a country or departmental policy of an organization. For example, if the objective of the extension program is self food efficiency, the objective of the project could be increasing crop production, milk production, honey production
- A program is broader in scope than a project.

Components of the project setting include:

- **Physical environment**: natural environment, agro-ecological zones, climate, natural resources, major crops, livestock, constraints on food production, susceptibility to natural disasters
- **Infrastructure**: roads, schools, government facilities, health care facilities, community centers, water and sanitation projects that are relevant to potential projects
- Human resources: education level, size/composition of the labor pool .

- Beliefs and practices: cultural, religious, social, political
- Economics: wealth, distribution of economic classes, sources of income, employment potential
- External institutions and policies: government, donors, NGOs, PVOs

Project design

- Is very broad in scope and includes *everything* that must be determined before a project can proceed.
- ✓ is the systematic identification and prioritization of problems, their causes and consequences, and the planning of interventions that will address these issues.

Challenges or constraints to projects

- Any project have a number of project constraints. They are cost, scope, quality, risk, resources, and time.
- **Cost:-** is the budget approved for the project including all necessary expenses needed to deliver the project.
- Scope:- is what the project is trying to achieve. It entails all the work involved in delivering the project outcomes and the processes used to produce them. It is the reason and the purpose of the project.
- **Quality:-** is a combination of the standards and criteria to which the project's products must be delivered for them to perform effectively.

- **Risk:-** is defined by potential external events that will have a negative impact on your project if they occur. Risk refers to the combination of the probability the event will occur and the impact on the project if the event occurs
- **Resources**:- are required to carry out the project tasks. They can be people, equipment, facilities, funding, or anything else capable of definition (usually other than labor) required for the completion of a project activity.
- **Time:-** is defined as the time to complete the project. Time is often the most frequent project oversight in developing projects

Project Performance/quality/safety

- Scope, time and cost are the Main challenges for the project and they are known as the three Project Performance/quality/safety.
- project success is the delivery of the required product, service, or result *on time and within budget*
- Project quality is affected by *balancing the three* interrelated factors.
- The relationship among these factors is such that if any one of the three factors change, at least one other factor is likely to be affected.



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- To understand the significance of scope, one must appreciate the relationship between scope and the project objectives.
- For the scope to contribute to project quality, it must be managed to meet the demands of the project objective by reliably providing the required functions, nothing more or nothing less.

How a project is designed?

- Project design provides the structure of what has to be achieved, how it is to be implemented and how progress will be verified. Therefore the design is the most crucial phase.
- Designing a project requires an upfront investment.
- There are different approaches to project design. Many development organizations and donor agencies use project cycle management methodology and the logical framework tool the most.
- In many cases, they are even mandatory.

Project Life Cycle

Every project has to follow a series of phases, allowing the process to be guided from the moment the problem is identified until it is solved.

This series of phases is known as the project cycle.

Each phase is crucial and should be fully completed before going on to the next.

- The principal stages in the life of a project are four:
- 1 Initial Phase
- 2 Planning Phase
- 3 Implementation Phase
- 4 Completion phase

Initiation Phase:-

- The first phase involves the identification of a need, problem, or opportunity
- The idea is usually formed through discussion with specialists and local leaders from the community as a need based issue and this is crystallized in to a proposal

Planning Phase

- In this phase, project team provide the planning for how doing work & when doing it.
- Planning is critical part of a project, because in this phase determines who must do which work & how can be confident to the group work.

Implementation phase

- During the third phase, the implementation phase, the project plan is put into motion and performs the work of the project. It is important to maintain control and communicate as needed during implementation.
- During project implementation, people are carrying out the tasks and progress information is being reported through regular team meetings.
- The project manager uses this information to maintain control over the direction of the project by measuring the performance of the project activities comparing the results with the project plan and takes corrective action as needed.

Completion phase

• During the final closure, or completion phase, the emphasis is on releasing the final deliverables to the customer, handing over project documentation to the business, terminating supplier contracts, releasing project resources and communicating the closure of the project to all stakeholders.

The Project Environmental Assessment

- Environmental Assessment (EA) is a process whose breadth, depth and type of analysis depend on the nature, scale and potential environmental impact of the proposed project.
- Project will have a significant impact on the environment. These could be both positive and negative.
- The positive environment effect needs to be enhanced and the negative effect needs to be prevented or reduced thorough appropriate mitigation measures

- The three most urgent areas of environmental concerns are:
- considerable land degradation including loss of nutrients owing to removal of animal manure and crop residues for use as a fuel and cattle food,
- The low quality and availability of water as a result of which only about one-fifth of the population has access to safe water and
- The rapidly growing urban environmental problems including lack of sanitary facilities, inadequate refuse collection, and low standard of housing.

Environmental Impact Assessment

- In Environmental Impact Assessment (EIA) there are four major stages to the process:
- Screening
- Scoping
- Impact assessment and evaluation-preparation of environmental impact statement
- Monitoring and Auditing

Screening

• Screening is the initial review of a project to determine if an EIA is required.

Scoping

• Once a decision has been made to commence an EIA the next exercise is to assess the likely major impacts of the project on the environment.

Impact Assessment & Evaluation

• Following the decision to proceed with a full EIA, the next stage of the process is the most exhaustive and consequently expensive part of the assessment.

Monitoring & Environmental Auditing

• When a project has moved to implementation the final stage of the Environmental Impact Assessment (EIA) process, or a component of project management, it is environmental auditing. This is linked to the environmental monitoring of the project.

Projects are a part of an overall development strategy and a broader planning process; as such, they must fit appropriately. **Project is specific in scope**, and Activities, Generally the project characteristics are very different from DP.

Types of projects

A project can cover a wide range of operations, from small initiatives to complex programmes.

Projects is classified as small, medium, and large or complex, based on a scoring system that takes into account various project characteristics.

classification of project in terms of their size

Classification	Small	Medium	Large Project/
	Project	Project	complexity
Total time	0–1year	1–3 year	More than 3 year
Score			

There are three aspects to complexity:

- 1. The number of people who are actively involved in the project
- 2. Geographical/temporal distribution of the project activities
- 3. Cultural distribution of the project team

Project planning Process

• The project development process spans that period of time that begins with feasibility studies and ends with the completion of construction

Steps to Planning a Project

To plan projects better here are the following steps to the process of projects planning.

- Step 1: Create a Project Plan
- Step 2: Create a Resource Plan
- Step 3: Create a Financial Plan
- Step 4: Create a Quality Plan

- Step 5: Create a Risk Plan
- Step 6: Create an Acceptance Plan
- Step 7: Create a Communications Plan
- Step 8: Create a Procurement Plan
- Step 9: Contract the Suppliers
- Step 10: Perform Phase Review
- Step 11 : Project Scope Planning

1.Create a Project Plan

- Firstly, you need to create a comprehensive Project Plan, which is critical to the success of the project.
- The Project Plan identifies the Work Breakdown Structure (WBS) of the phases, activities and tasks to be undertaken.
- It defines the sequencing, duration and dependencies of each task,

2.project Resource plan

• a detailed assessment of the resources required to undertake the project should be made. The required labor, equipment and materials should be listed and the amount of each resource quantified.

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• Includes people and equipment's

≻Human Resource Plan

- This plan tries to answer following questions but rather precise details:
- 1. What kinds of people are required to complete the project necessary, competencies?
- 2. What should they do roles & responsibilities?
- 3. Whom will they report to?
- To arrive at human resource plan, project planner need to refer organization structure & figure out necessary changes and compliances required for project requirement.

3. Project financial planning

- It tries to identify cost elements to be consumed during the project lifecycles such as
- Monetary resources requirement (people, machinery, material, equipment, space, etc.)
- Provisions for risk management (people, machinery, material, equipment, space, etc.)
- It is expected to capture cost implication of
- People, equipment, facilities, etc. required to complete given activity
- Inflation, exchange rates applicable for context of the activity

4. Project Quality planning

What can we expect project quality plan to highlight?

- 1. Quality Process & Policies
- 2. Cost-Benefit Analysis
- 3. Cost of Quality
- 4. Quality Metrics: Establishing quality metrics is very important to ensure stability and performance of the project. The parameters & permissible values such as availability (acceptable: 98.95%), failure rate (0.02%) & frequency,
- 5. Quality Checklist: checklist to ensure specific set of project activities are performed in standardized manner
- 6. Control Charts: This is chart representation to visualize process stability & performance.

5. Risk Management Plan

What can we expect from project risk management plan?

- 1. Risk Identification and risk category
- 2. Risk Assessment: Risk probability and impact & risk tolerance
- 3. Risk Responses:
- 4. Risk Management: Mechanism, Roles and responsibilities, Budget Provisioning and Risk Tracking

6. Create an Acceptance Plan

- The key to customer satisfaction is in gaining approval from the customer that the deliverables meet the quality criteria stated in the Quality Plan.
- To ensure that customer acceptance is sought for each deliverable produced by the project, an Acceptance Plan is created.

7. Communication Plan

Points to be considered during communication

• represent the poor or beneficiary of the project as real individuals, not as symbols of suffering which enable us to raise funds.

8. Procurement Plan:

Project procurement plan documents purchase policy illustrating. purchase process, buy/lease/rent decisions, vendor(saller) selection, negotiation, financial concurrence, duration, legal concurrence, etc

9: Contract the Suppliers

• With a clear view of the procurement items to be acquired, the project team will set out to select and contract one or a small number of preferred suppliers to the project.

10: Perform Phase Review

• A Phase Review is undertaken to ensure that all of the required Planning activities have been completed and to provide formal approval to proceed to the Project Execution phase.

11.Project Scope Planning

- ✓ project scope is the definition of what the project is expected to achieve and specify the budget of both time and cost that needs to be provisioned to create the project deliverables before the project gets closed
- ✓ Any project is expected to provide its stakeholders with certain outcome, which is commonly termed as project deliverables.
- ✓ These project deliverables depends on the scope of the project
- Analogically, defining a project scope is like drawing a map
- project scope outlines the extent of project deliverables
- Without a project scope, project execution can go haywire.

Elements of project planning

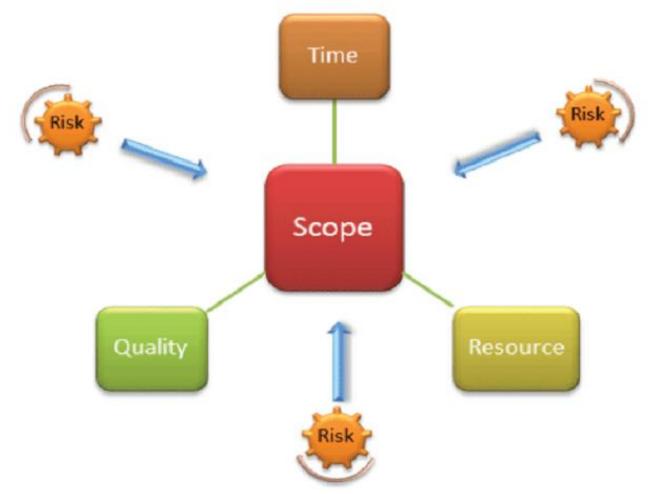


Figure 2: Elements of Project Planning

Aspects of Project planning.

• A project plan can be considered to have key **aspects** that have to be managed:

1. Technical aspect

- The technical analysis concerns the project's inputs (supplies) and outputs (production) of real goods and services.
- Good technical staffs are essential for this work;

2. Institutional managerial aspects

• A whole range of issues in project preparation revolves around the overlapping institutional, organizational, and managerial aspects of projects, which clearly have an important effect on project implementation.

3.Social aspects

- project analysts are also expected to examine carefully the broader social implications of proposed investments.
- Social considerations carefully considered to determine if a proposed project is as responsive to national objectives as it can be.

4 Financial aspects

• The financial aspects of project preparation and analysis encompass the financial effects of a proposed project on each of its various activities. • The analyst will need budget projections that estimate year by year future gross receipts and expenditures, including the costs associated with production and the credit repayments to determine what remains to compensate the management skills, and capital.

5.Economic aspects

• The economic aspects of project preparation and analysis require a determination of the likelihood that a proposed project will contribute significantly to the development of the total economy and that its contribution will be great enough to justify using the scarce resources it will need.

Meaning of 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.
- It utilizes national and regional frameworks or Planning Guidelines to provide a basis for day-to-day planning decisions.
- Is the 'parent' document, which sets out the strategic framework within the zoning and other objectives of the local area plan must be formulated.

- Development plan is not the same for all countries nor is it the same for a country in different times
- The nature of countries development plan is influenced by elements such as
- ✓ Skilled man power
- ✓ availability of natural resource
- ✓ Level of technical, administrative and managerial competence
- But two most important factors conditioning the form and role of countries planning include:
- \checkmark Institutional frame work and
- ✓ Level of development

Types of development planning

The planning is classified in to four ways as follow below

1.Strategic developmental Plan

- Strategic planning involves the participation of the community in identifying problems that stand between the community and its goals and moves the community toward realizing its long-range vision.
- A strategic plan generally takes a **3**, **4**, **5** even **7** years time span.
- 2. Tactical Developmental planning
- Supports **SDP** by translating in to specific plans. **1-3 yrs**
- Concerns with responsibility and functionality of lower level departments.

3.Comprehensive Developmental Plan

- The Comprehensive Development Plan investigates and examines a variety of issues, both tangible and intangible
- Comprehensive plans usually require at least a year to complete, and are long term, covering a **five- to ten-year** time span
- The Comprehensive Development Plan is most effective when it is consistently referenced in order to:
- ✓ provide reasonable expectations for future development.
- ✓ Provide a roadmap which will guide future developments, in terms of locations, sitting and design requirements and necessary infrastructure

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- ✓ Determine the appropriateness of rezoning requests, in terms of future land use and timing
- Referred to as aggregative, global or overall planning, covering an entire economy.
- Is most advanced form of development planning
- Begins with the projection of specific rate of increase in income or production over the planning period as the prime target

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- The formulation of comprehensive plan involves the construction of a growth model for the period of plan which estimates the effect of the assumed rate of growth on such aggregates as public and private consumption, savings, investments, imports and exports, employment and the demand and supply implication
- It integrates both the formulation of an integrated public investment plan and plan for the private sector

Comprehensive planning can be accomplished by two procedures:

- Forward planning: planning from top to down. Starts with the aggregate plan and disaggregates, meaning that it divides to sub interrelated plans
- **Backward planning:** is planning from below, planning from the bottom to up. Is reconciliation of the individual, public and private investment projects and programs with the aggregative planning model.

Because of the limitations of public investment plans, much of the discussion about planning has assumed that all countries should plan comprehensively.

4.Operation Developmental planning

- Looks at effectiveness of operations
- Sit at bottom of lower level.
- Can be single use and ongoing plans, usually takes **1yr or some times1-3 yrs.**

What makes a good development plan?

- •Create a clear strategic framework for the proper planning and sustainable development of the area over the duration of the plan
- •Set out an over-arching vision for the development of the area to which the plan relates.
- Give spatial expression to the economic, social and cultural aims of the County or City Development Strategy.
- •Be grounded in public and political consensus around the plan's strategic framework.
- •Provide a clear framework for public and private sector investment in infrastructure and in development in the area, having regard to both national and regional plans and policies

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- Protect and enhance the amenities of the area.
- Offer clear guidance to developers in framing development proposals and to the planning authority in assessing such proposals.
- Establish a policy framework within which more detailed plans can be drawn up for specific parts of the planning authority's area.
- Be capable of implementation and monitoring.

Development plans should be user friendly, logical, internally consistent and up-to-date and in a format which is suitable for hardcopy, Internet and CD versions.

Key concepts of a successful development plan:

- Having a Planning Commission with adequate organizational structure and qualified experts in various relevant field
- Having a proper development policy;
- Enlisting public cooperation or support without which no plan can be a success.
- The supervisor and employee have realistically balanced benefits with costs;
- The supervisor is committed to helping the employee accomplish the plan;
- The plan is outcome-focused, not activity-focused (i.e., shows how both supervisor and employee will know when the employee has improved);

Chapter three : Project Development

3.1. Generation and screening of project Idea (Identification)

Generation of project Idea

• Idea generation means the process of creating, developing, and communicating ideas which are abstract, concrete or visual.

Project ideas originate from abroad of:-

- Investment proposals of multinational firms.
- Programming activities of bilateral and multilateral aid agencies
- Influence of investment strategies adopted by other developing countries
- Prevailing professional opinion or public consensus

Screening of project Idea (Identification)

- The first step in the project cycle is to identify an issue that a project could address.
- Project Identification is the process of selecting a theme to be further developed into a project concept.
- It outlines the location where the project will occur, the broad approach the project will take and the problem (need) to be addressed.
- **Idea screening** is the process of evaluating/testing ideas to drop as many ideas as possible from consideration

From whom Project ideas may also emanate.

Projects are usually identified by the following entities:

- Government agencies preparing the national, regional or sectoral development plan
- Bilateral or multilateral aid agencies conducting country economic/sector studies or ex-post evaluation of completed projects; and
- Public or private-sector entities in the country or donor countries, municipalities, local residents, non-governmental organizations (NGOs), academics and others conducting a project.

- There are many tools that enable communities to identify their needs. These tools can be adapted for the capacity assessment.
 TOOL 1 Listening
- By listening for the issues about which people have the strongest feelings, it is possible to identify the issues that they most want addressed and projects which they are most likely to participate in

TOOL 2 Interviewing

This tool helps us to gain greater understanding of the issues.It involves talking to key people in the community in order to discuss their knowledge, experience and understanding of the issues.

Key people include health workers, traders, religious leaders, village chiefs, pastors and teachers etc

Take care not only to interview the powerful, but also to interview those whose views are not usually heard.

Use open-ended questions such as:

- What are the main problems you face in your area of work?
- What are the main pressures that people in the community face?
- What simple things could be done to improve the situation?

Tool 3 Focus groups discussion

- This tool is used with a group of people. It helps them to understand and voice some of the problems they face and the needs they have.
- A focus group enables people with different views to discuss their differences, challenge assumptions and come to a collective understanding of the needs of the community.

TOOL 4 Community mapping

- This tool involves community members drawing a map of their community to tell their story together.
- They draw either on paper or outside on the ground, using whatever resources are available.
- They are given little guidance of what to include. The important point of the exercise is to discus.
- Once the map has been drawn, encourage discussion by asking questions such as:
- How did you decide what to include?
- What was excluded?
- What was emphasized?
- Which are the most important parts?
- What was difficult to represents?
- what people have drawn ?

Capacity assessment

• Communities should be encouraged to use their own capacities and resources to address the problems they face

Capacity assessment involves six types of assets:

- **HUMAN:** These enable people to make use of their other resources. They include skills, knowledge, ability to work and good health.
- **SOCIAL:** These are based on relationships and include organizations and groups within the community, political structures and informal networks.

- **NATURAL:** These form the local environment and include land, trees, water, air, climate and minerals.
- **PHYSICAL:** These are man-made, such as building, transport, water supply and sanitation services, energy sources and telecommunications.
- ECONOMIC: These are things that people can use to sustain their livelihoods, such as money and savings, grain stores, livestock, tools and equipment.
- **SPIRITUAL:** These include faith, scripture, guidance and prayer

Steps in project identification

- Project identification Viewed as a technical process identification involves, in the following sequence.
- 1. Preliminary stakeholder analysis
- 2. Problem analysis/ Situation analysis
- 3. Setting of objectives
- 4. Analysis of alternatives
- 5. Logical framework thinking
- 6. Analysis of assumptions and associated risks
- 7.SWOT analysis and project sustainability

1. Stakeholder analysis

- Stakeholders are individuals, groups or organizations who have an interest or stake in a project.
- This enables identification of the primary stakeholders, as well as partners and their roles.

2. Situation analysis

- It is vital to understand the causes of the problem or constraint, how they affect stakeholders, and how to focus on tackling them.
- Identification of a core problem the problem or situation to be addressed.
- The project identifies the problems preventing the community from achieving its long range goals.

3.Setting of objectives

- When there is agreement and understanding about the core problem and the causes and effects, the project objectives can be specified
- Eg (1) There is limited access to markets for produce
- (2) Drought has reduced crop yields this year
- (3) The nearest health clinic is 15 miles away by foot

4.Analysis of alternatives

- The project identification and preparation process will initially involve choice between alternative forms of intervention or project strategy.
- For example: the objective of a project may be to strengthen the marketing systems for a specified crop in a given region.

• The objective of increasing output of a specific crop might be achieved through improvements in research, extension, input supply, access to credit, marketing facilities and market information; or a combination of these.

5.Logical framework thinking

- way of defining and presenting the objectives of a project, indicating how those objectives will be achieved and identifying the main factors external to the project that may introduce a risk of poor performance.
- It involves definition of the project inputs, activities, and outputs that lead to the achievement of objectives

6.Analysis of assumptions and associated risks

- In the formulation of a project there will be four main sets of risks \setminus
- ✓ Inherent risks: it is assumed that inputs and activities will lead to outputs, and that outputs will lead to achievement of purpose which will contribute to the goal.
- Risks of this type are not normally specified in the Log frame
- ✓ Universal risks: for example, the risk of war, rare extreme climatic events or other natural disasters.
- ✓ Internal risks: there are also risks relating to the inputs and activities under the control of management. Examples include: delays in the supply of equipment, delays in the assignment of project staff, project staff are not suitably qualified.

- they are thus not normally specified in the Logframe
- ✓ External risks: factors upon which the success of the project depends, but which are largely outside the control of project management.
- This is the important group of risks for which assumptions shown in the Logframe may be necessary.

7.SWOT analysis and project sustainability

SWOT (Strengths, Weaknesses, Opportunities, Threats)

• A project can be said to be sustainable when it continues to deliver benefits to the project beneficiaries for an extended period after the main part of the external assistance has been completed.

Project Preparation

- It brings a project plan to the point amenable (conformable) to appraisal.
- In other words, the level of maturity where it is possible to determine whether the project **may be effectively implemented** (and if so, how it might be implemented), **whether the project cost is acceptable** when considering its spillover effects on economic and social development, and whether the project is environmentally sound.
- Project preparation is the process ensures the identification and elimination of key risks at the earliest possible time and maximizes development opportunities by ensuring that projects are well conceptualized.

Chapter Four Project appraisal techniques and financing

- Appraisal is the analysis of a proposed project to determine its merit and acceptability in accordance with established criteria.
- This is the final step before a project is agreed for financing. It checks that the project is feasible against the situation on the ground that the objectives set remain appropriate and that costs are reasonable

Project Appraisal Criteria's

- **1 Technical:** Clearly, every project must be technically feasible. Technical Appraisal provides a comprehensive review of all technical aspects of the project such as rendering judgment on merits of technical proposals and operating costs.
- **2 Financial:** Capital, rate of return, specifications, contingencies, cost projection, capacity utilization, and financing pattern
- **3 Economic:** Considered as a supportive appraisal it reviews economic rate of return, effective rate of protection and domestic resource cost.

4 Social and gender: A social appraisal reviews the project design and the process of project identification through to implementation and monitoring, from a social perspective

- The Gender Analysis Matrix (GAM) is a tool for conducting a gender analysis of a project (Parker, 1993).
- **5 Institutional:** are the supporting institutions in place?

Can they operate effectively within the existing legislative and policy environment?

Has the project identified opportunities for institutional strengthening and capacity building?

6 Environmental: Impact on land use and micro-environment, commitment of natural resources, and Government policy will the project have any adverse effects on the environment?

Have remedial measures been included in the project design?

7 Political: will the project be compatible with government policy, at both central and regional levels?

8 Sustainability and risk: will the project be exposed to any undue risks?

Will the project benefits be sustainable beyond the life of the project?

There are two types of measures of project appraisal techniques i.e. *undiscounted and discounted*.

- The basic underlying difference between these two lies in the consideration of <u>time value of money</u> in the project investment.
- Undiscounted measures do not take into account the time value of money, while discounted measures do.

Time Value of Money

- The TVM is the concept according to which a sum of money owned in the present has a greater value than the value of the same sum received at a moment in the future.
- The Time Value of Money (TVM) includes the concepts of future value and discounted value.

Investment Criteria

- Investment is the act of investing; laying out money or capital in an enterprise with the expectation of profit.
- It is also money that is invested with an expectation of profit. Below the following are the Investment appraisal techniques.

1. pay back period

- It is a simple method which *estimates the length of the time required for an investment to itself out*; that is the number of years required for a firm to cover its original investment from the net cash inflows.
- PBP is the amount of time it takes to recover the cost of an investment. It is the expected number of years it will take for a company to recoup the cash it invested in a project.
- Investors who are risk averse often use this technique in evaluating projects. Such investors need to *receive cash at the early stages of projects since the future is uncertain.*
- This, the payback period method is somewhat *better reflection of liquidity than profitability*

* Accept /Reject criteria

- 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.
 Exercise 1
- Project cost is initial investment 30,000 and the cash inflows are 10,000, the life of the project is
- 5 years. Calculate the pay-back period.
- **Solution** Pay-back period =Initial investment/Annual cash inflows.
- 30,000/10,000= 3 Years

2. Net present value (NPV)

- It is the sum of the present value of all future cash flows.
 The present value refers to discounted value of cash flows at future dates.
- A project is considered for investment if its NPV is positive.
- It is a discounted cash flow technique (DCF).
- It is the present value discounted at firms required rate of return on the *stream of net cash flows from the project minus the projects net investment*. NCF-NI

- NPV = Present value of Net benefit present value of investment
- Or NPV = INV +P1/(1+i)¹+ P2/(1+i)²⁺ P₃/(1+i)³ +p1/(1+i)ⁿ

Where,

• P1..... P ,, is net cash flows. P = cash inflow - cash out flow

- i = the interest rate or marginal cost of capital.
- n = the project expected life.
- INV = the initial investment.
- Cash flows is the money that moving or flowing in and out of business.

3. Benefit cost ratio (BCR)

- It is also called as profitability Index (PI)
- It is the ratio of present value of future net cash flows over the life of the project to the net-investment
- If a project has a PI value greater than or equal to1, (PI = 1) it should be accepted and should be rejected if the PI value is less than 1 (Pl<1).
- It is the ratio of present value of future net cash flows over the life of the project to the net-investment.
- BCR or PI =Present value of Net benefit/Present value of investment

4. Internal Rate o f Return (IRR)

- It is the interest rate that will equate the *sum of net cash flows to the initial investment*.
- The interest rate that satisfies the equation is called internal Rate of Return (IRR)
- Acceptability of project depends upon *comparing the IRR with the investor's required rate of return (RRR)* sometimes called *minimum acceptable rate of return (MARR)*
- If IRR is greater than RRR (MARR), accept the project, if IRR is less than that, reject the project, if IRR=RRR, be indifferent.
- The IRR method implicitly assumes that returns from an investment are reinvested to earn the same rate as the IRR of interest

Risk And Uncertainties In Projects

- Includes disease outbreak, fall in prices, natural calamities like floods, etc.
- These unforeseen incidents can be grouped into two i.e.
 risks and uncertainties.

<u>Risk</u>

- refers to the possibility that some unfavorable event will occur.
- It is the possibility of loss, injury, or exposure to harm.

Types of Risk

1. Socio-Economic Social aspects of socio-economic risk include changes in tastes, attitudes or social behavior towards production and consumption.

2. Economic risks

- changes in price of inputs and output inflation, recession, depression and other economic conditions which affect national income are primary concerns of the project.
- •As demand lags behind supply, producers are concerned that prices will fall.

3. Marketing risks

- Risks may also result from *uncertainty in demand*, *supply and prices*
- When to move the product to market is the age-old nemesis(punishement)
- New technologies and product forms are being evaluated in an attempt to avoid some of the marketing risks for some weather dependent projects

4. Production risks

- Many of the marketing risks are also related to production problems.
- Marketing problems may be logistical in nature, which may impede production schedules

 Production risks may also be due to lack of trained manpower to manage the operation(work) and resource lack.

Other risks

- •Financial risks relate to changes in supply of funds for production and marketing.
- Credit restriction
- Lack of education and understanding about the project
- Political risks: change in the government and government policies and regulations
- **Physical or pure risks**
- Physical risks results from conditions of nature, such as rain windstorms, clouds, flooding, and drought.
- Other types of pure risks are plant breakdowns, and failure of safety and other devices

Uncertainty

- It is a situation in which the probability of an outcome is not known.
- Insurance cannot provide any cover against uncertainty.
- Uncertainty is a state of being doubtful(controversial) about future events, which cannot be foreseen exactly.

Types of Uncertainty:

- Price uncertainty; It is associated with the price of products and input factors
- Yield uncertainty: The fluctuations in yield are associated with weather conditions and incidence of diseases and pests and the impact of new practices.

- Technological uncertainty: Technological changes influence production function and create conditions of variability, which, in turn, lead to uncertainty
- Institutional uncertainty: Conditions of tenure, functioning of credit agencies, action and outlook

Normally risks and uncertainties are removed by the following methods:

- (a) Diversification
- (b) Insurance
- (c) Continuous or Sequential Marketing
- (d) Future Market or Production Contracts
- (e) Government Programs
- (f) Third-Party Equity Capital
- (g) Use of Safety Device

The time value of money (TVM)

- The *time value of money* (TVM) is the concept that *money* available at the *present time* is *worth* more than the identical sum in the future due to its potential earning capacity.
- This core principle of finance holds that, provided *money* can earn interest, any *amount of money* is *worth* more the sooner it is received.
- The time value of money is sometimes referred to as the <u>net present value</u> (NPV) of money. ⁸⁴

Cost of capital

- •*Cost of capital* is the required return a company needs in order to make a capital budgeting project, such as building a new factory, worthwhile
- •refers to the opportunity *cost* of making a specific investment.
- It is the rate of return that could have been earned by putting the same money into a different investment with equal risk. Thus, the *cost of capital* is the rate of return required to persuade the investor to make a given investment.

social cost benefit analysis

- social cost benefit analysis is a systematic and cohesive method to survey all the impacts caused by an (urban) development project or other policy measure.
- It comprises not just the financial effects (investment costs, direct benefits like profits, taxes and fees, etc), but all the societal effects, like: pollution, environment, safety, travel times, spatial quality, health, indirect (i.e. labour or real estate) market impacts, legal aspects, etc.

- The result of a social cost benefit analysis are: •An integrated way of comparing the different effects. All relevant costs and benefits of the different project implementations (alternatives) are identified and monetized as far as possible. Effects that cannot be monetized are described and quantified as much as possible.
- Attention for the distribution of costs and benefits. The benefits of a project do not always get to the groups bearing the costs. A social cost benefit analysis gives insight in who bears the costs and who derives the benefits.

• Comparison of the project alternatives. A social cost benefit analysis is a good method to show the differences between project alternatives and provides information to make a well informed decision.

• Presentation of the uncertainties and risks. A social cost benefit analysis has several methods to take economic risks and uncertainties into account. The policy decision should be based on calculated risk.

Project Cost

- There are five types of costs in a project:
- fixed cost, variable cost, direct cost, indirect cost, and sunk cost.
- Fixed costs are those that do not change throughout the project.
- Variable costs as the name suggests, are costs that change during the project life cycle.
- Variable costs are highly influenced by the uncertain environment.

- Direct costs are expenses that come out of the project budget directly (i.e. employee salaries).
- Indirect costs are those that are shared across multiple projects.
- Indirect costs are sometimes also referred to as oversight costs.
- Sunk costs are those that have been incurred in a project, but have not produced value towards the project's objectives.

Project Financing

According to Khan and Jain, "Finance is the art and science of managing money". It includes financial service and financial instruments.

Finance also is referred as the provision of money at the time when it is needed.

The concept of finance includes capital, funds, money, and amount.

• Finance can be classified into two major parts: 1.Private Finance

• This includes the individual, Firms, Business or Corporate Financial activities to meet the requirements.

2. Public Finance

• These concerns with revenue and disbursement of Government such as Central Government, State Government and Semi-Government Financial matters

5.1 Sources of Project Financing

• Sources of finance may be classified under various categories according to the following important heads.

• 1. Based on the Period

• Sources of Finance may be classified under various categories based on the period.

A, Long-term sources

- When the finance mobilized with large amount and the repayable over the period will be more than five years, it may be considered as long-term sources.
- B) Short-term sources: Short-term source of finance needs to meet the operational expenditure of the business concern.

2.Based On Security Finance

- If the finance is mobilized through issue of securities such as shares and debenture, it is called as security finance.
- It is also called as corporate securities.
- This type of finance plays a major role in the field of deciding the capital structure of the company.
- Characters of Security Finance
- Security finance consists of the following important characters:
- Long-term sources of finance.
- It is also called as corporate securities.
- Security finance includes both shares and debentures.
- It plays a major role in deciding the capital structure of the company.
- Repayment of finance is very limited.
- It is a major part of the company's total capitalization.

5.2 Ethics in Fund Raising

- It is important that our fundraising methods reflect out organization's values.
- •We also should not want to offend potential donors or damage our reputation in any way. For example, Christian organizations might decide not to use any fundraising method that involves gambling, such as lotteries and raffles.
- •It may be useful to consider marketing principles when developing a fundraising strategy.
- •However, they should be applied carefully to fundraising for development work because the money that donors give is all spent on poor people.

- It does not bring the donors any financial return for their money. In a sense, poor people become the 'product' we are 'selling' to donors.
- •It is important to ensure that we treat both the potential donors, and those we are raising money for, with respect.
- •We might be tempted to exaggerate the needs of the beneficiaries in order to obtain more funds.
- Photos of unhappy children might be used to increase the donors' sympathy
- •Fund rising activity should be ethical interims of all dimensions

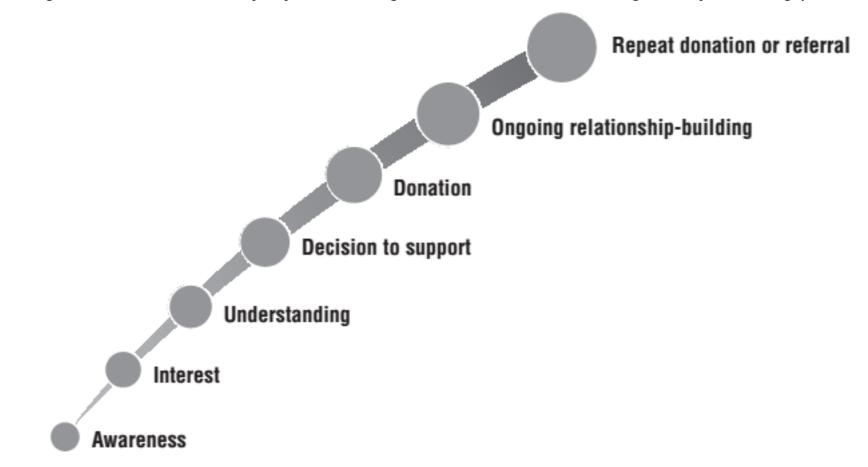
Fundraising values document

- •It can be useful to write a set of fundraising values.
- •A fundraising values document should be written with our organization's vision, mission and values in mind.
- The key questions a fundraising values document asks are:
- •Are we being truthful in the information we provide about ourselves and the beneficiaries?
- oDo we treat our donors with respect?
- **5.3 Key points for fund rising values**
- there should be a good balance between rationality and emotion in any fundraising proposition.

- believe that money and time as forms of support are of equal importance.
- thank supporters for each donation, unless a supporter has indicated that they would not like their gift acknowledged.
- seek to inform supporters for the impact of their giving on beneficiaries
- seek to provide the best possible service to supporters, irrespective of the value of their donation
- seek to be truthful in all fundraising propositions
- honor supporters' wishes in how their gifts are to be used, whilst making it clear how the greatest impact on beneficiaries would be achieved.

• Fund rising principle

As a general rule, successful fundraising will take donors through the following process:



1. Educate

- Education is an effective way of gaining interest in the work, leading to donations
- Donors are more likely to give if we are specific about what the needs are.

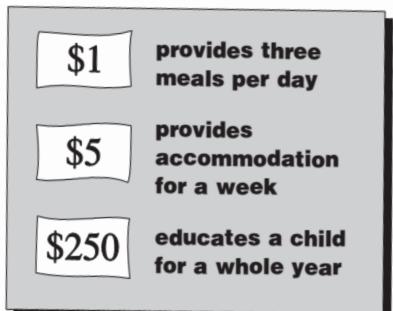
2. ASK

- Focus on the following questions before asking
- What methods do we use when we approach people for funding?
- What methods are more successful and why?
- However, sometimes we need to ask for support directly, as people are unsure about how to respond
- How we ask depends on the local culture.
- It is important that we find appropriate ways to approach potential donors for money.

It is important to consider ways to make it easier for donors to give money. For example,

- always provide a contact address in educational materials, fundraising literature and proposals.
- Perhaps provide collection boxes that can be left in homes and offices and organize for them to be collected on a regular basis
- Unlike other types of donors, institutional donors and trusts will not seek out organizations to fund or simply respond to the general fundraising literature we produce. So, you have to ask them directly for money for specific projects

- The organization could be specific about what it asks for.
- If people have a good idea of exactly what their money will help to fund and how it will change lives, they will be more willing to give.
- The organization might therefore tell potential donors what different sizes of donations will fund



3. Use A Personal Approach

- Fundraising is all about relationships.
- Our aim should be to build good relationships between donors, the organization and the people we serve, it might be more time consuming but also more worthwhile and effective.
- We need to treat donors as people and not just as money providers.
- we need to show donors that the *people* we serve are *individual people* and not simply a certain category of *people* who receive donors' support.
- In order for donors to trust us with their money, we should be seen as both professional and yet personal at the same time

- The most effective way is to meet people face-to-face because it is easier for us to get people's attention.
- This might mean visiting a company or funding agency.
- Dress appropriately, as first impressions are important
- •Using stories of individuals in fundraising materials can help potential donors identify better with the needs meeting.
- They realize that real people are experiencing real problems.

oIf we can tell donors about specific people who are already benefiting from our work, they are more likely to give money because they know the kinds of people who will benefit and that their money will be well spent

4. Understand the donor's viewpoint

Donors usually have two main reasons for giving to our work:

- They trust that we will spend their money wisely.
- They think their donation will make a difference to people's lives.
- oIt is useful to remember this as we think about how we carry out our projects and how we approach them.

•We could use role play to help us to think about the donor's viewpoint.

•Some donors might have additional reasons for giving towards our work.

oIt can be useful to think about what these might be. For example, companies might be willing to donate money only if there is some benefit for them.

•We need to make a careful decision about whether we want this kind of funding.

5. Seek ethical donors

- It can be tempting to pursue easy sources of funding or take whatever money is offered in order to maximize our funds
- However, in the case of donors who give large sums of money, particularly companies, it is important to consider whether accepting money from them might be unwise:
- ➢ Perhaps the donor has a bad reputation. By accepting their funds, we may put our ability to obtain funds from other donors at risk.
- ➤The donor might wish to influence our work in a way that goes against our organization's mission and values.
- ➤The donor may raise its funds in an unethical way. For example, a clothing company might be using child labor to make its clothes

Points to be considered about the donor:

• Are they socially responsible? In other words, does the donor look after their workforce, preserve the environment and work to improve society?

■ How are they viewed by the public?

■ Is there any conflict between their mission and values and what our organization stands for?

■ Do the organization's employment practices agree with good community development principles? *For example, do they discriminate against certain members of staff on the grounds of gender, age or ethnicity?*

6. Say thank you

•This might seem an obvious principle, but saying thank you gets more difficult as the number of donors we have increases.

- oIt is not only polite to say thank you and show that we value the donor's generosity − *it is vital if donors are to give money to us again*
- oIt is important that our expression of thanks is appropriate, *timely and not seen as wasteful*
- oa member of staff could perhaps *visit* the group to say thank you in person. Alternatively a *letter* could be written

• Try to make it personal and address it to an individual. Try to say something about the impact of their particular donation

•Later *they will receive regular reports* throughout the project as *part of the funding agreement* to show them how their money has been spent.

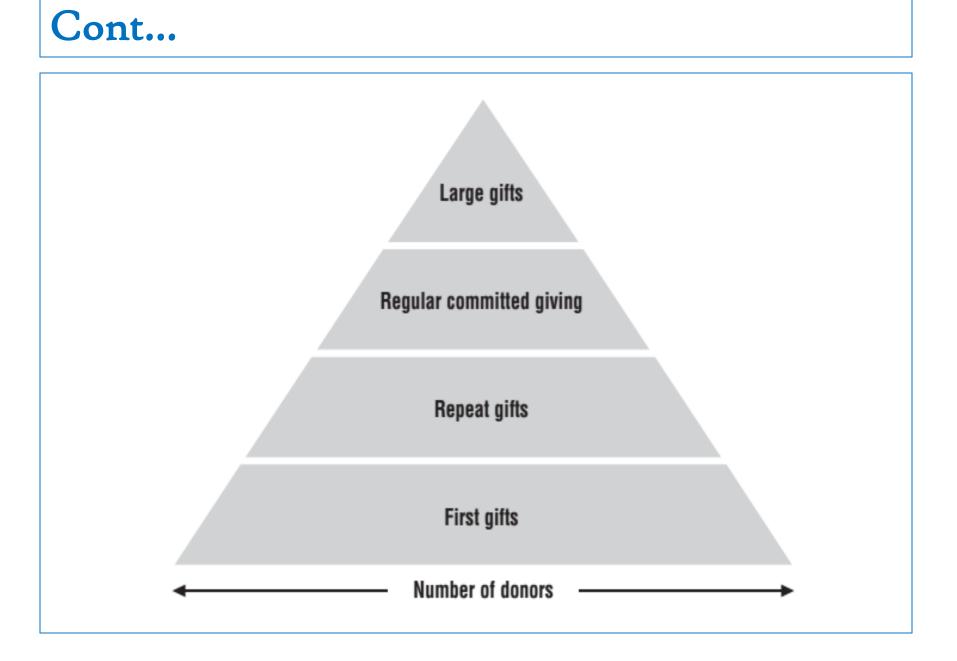
oIt is these reports which *will influence* their decision to fund us again in the future.

Important questions for self

- Do we thank all our donors?
- If not, can we think of appropriate ways to thank our donors?

7. Invest time and money in retaining donors

- □To create a stable funding base, we need to have donors who will donate money *again and again*.
- □It is more *cost-effective to retain* donors than to find new ones.
- The pyramid below shows that most donors will give once.
- While each layer is equally valuable, if we can move donors up the pyramid so that they become *regular*, *committed givers*, *we will have a more sustainable funding base*.



- Donors *need to have confidence in our organization* and the work we carry out before they are willing to donate again.
- They need to know that the money they donated in the past has been used wisely.
- □If donors feel that we have spent too much money on retaining their support, they will not give money again, as they will be unsure about whether their money will actually be spent on development work.
- This does not apply to institutional donors and trusts who require a full application for each project we seek funding for.

- Donors are more likely to donate again if they become committed to our cause or to what our organization stands for.
- □This commitment can be increased by enabling donors to involve themselves in what we do.
- □To turn one-time donors into regular donors, we should thank them for their donation and give them updates on how their money is being spent.
- One important benefit of investing time in retaining donors is that not only might they give further donations, but that they might also encourage others to give towards the cause.

8. Maintain a good reputation

- oA good reputation will enable us to retain donors and attract new ones
- •People are much more likely to give money to an organization that they have heard of and which is well-respected.
- •*Reputation is as important as the quality of our work and our fundraising methods.*
- Our reputation should match closely with what we are
 In general, the closer the match, the more our donors will trust us.

Some practical ideas for improving knowledge of our reputation include:

Keeping copies of letters from grateful beneficiaries and collecting quotes of positive things people have said about our work.

■ Getting our work evaluated. It is useful to have copies of evaluation reports to give to potential donors

■ Providing good service to our donors, such as saying thank you, answering correspondence promptly and keeping them updated about our work.

Preparing our accounts to show to donors who ask for them

■ Writing papers for academic journals and conferences in order to raise the profile of our organization

• Getting press coverage of our work. The more we can advertise our work in the media, the more money we are likely to raise.

Bringing well-known people into our organization by inviting them to be patrons (*A regular customer*), advisors or board committee members.

9. Be accountable

- When donors fund our work, they expect us to use the money wisely. If we do, they will trust us with their money again
- •However, if we do not use it wisely, they will not be interested in funding our work in the future and we might get a bad reputation.
- When we are stewards, something has been entrusted to us. If we are to be accountable, we should use what has been entrusted to us for what the donor intended.
- The way we show our accountability will vary depending on the source of funding

International Statement of Ethical Principles in Fundraising

- **Honesty:** Fundraisers will always be honest and truthful, upholding public trust and never misleading supporters or the public.
- **Respect:** Fundraisers will always be respectful of our beneficiaries and donors, following their choices and wishes, wherever possible.
- **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.
- **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.
- **Responsibility:** Fundraisers will always act responsibly, understanding that we share a common objective to promote fundraising excellence for the benefit of the common good.

Financial Management

- Financial Management is a vital activity in any organization. It is the process of planning, organizing, controlling and monitoring financial resources with a view to achieve organizational goals and objectives.
- The planning, directing, monitoring, organizing, and controlling of the monetary resources of an organization.
- is an organic function of any business. Any organization needs finances to obtain physical resources, carry out the production activities .

Con,t

- in other terms, Financial Management is the application of general principles of management to the financial possessions of an enterprise.
- Proper management of an organization's finance provides quality fuel and regular service to ensure efficient functioning.
- If finances are not properly dealt with an organization will face barriers that may have severe repercussions on its growth and development

Chapter five Project Management Information System

6.1 The Meaning of PMIS

•The project management information system (PMIS) is intended to store information essential to the effective planning, organizing, directing, and controlling of the project, as well as to provide a repository of information to be used to keep stakeholders informed about the project's status.

A PMIS is typically one or more software applications and a methodical process for collecting and using project information.

• The project management information system, which is part of the environmental factors, provides access to tools, such as a scheduling tool, a work authorization system, a configuration management system, an information collection and distribution system, or interfaces to other online automated systems.

•Information is essential to the design and execution of management decisions allocating resources in a project.

•Decisions coming from project planning, organizing, direction, motivation, and control must be based on timely and relevant information.

The Desirable Functions of a PMIS are as follow below:-

1. Budgeting and Cost Control Features

- In every project it is necessary to associate cost information with each activity and each resource in a project.
- An individual's pay can be defined in hourly rates, overtime rates, or one-time only rates.
- **2.Calendars Base** :calendars can be used to define working days and hours for each individual resource or group of resources on a project.
- These calendars are used in calculating the schedule for the project.
- The calendars can be used for reporting purposes and can be printed by day, week, or month for each individual resource or in the form of a full, possibly wall-size, and complete project plan in calendar form.

3. Internet Capabilities

- Project information can be directly posted to a web site to facilitate communication with team members and customers.
- In addition, project information can be shared through e-mail instead of to the screen or printer.
- Project team members can be notified of important changes through email such as updated project plans or schedules.

4. Graphics

- A PMIS has the ability to generate easily and quickly a variety of charts, including Gantt charts and network diagrams, based on current data.
- Once the baseline plan has been created, any modifications to the plan can easily be entered into the system, and the charts will automatically reflect those changes.

5. Importing/Exporting Data

- A PMIS allow the user to import from other applications, such as word processing, spread sheet, and database applications.
- For example, instead of retyping cost related information on resources (people or machines) from a spread sheet into the system, the user can simply import that spread sheet information as desired.

6. Handling of Multiple Projects and Subprojects

• A PMIS can store multiple projects in separate files with connecting links between the files, store multiple projects in the same file.

7. Report Generation

- A PMIS has extensive reporting capabilities. Among the reports a PMIS can generate are the following:
- Reports on the project as a whole.
- 2. Reports on the milestones of the project.
- 3. Reports that provide a variety of information with respect to a date range

8. Resource Management

• A PMIS can maintain a resource list consisting of resource names, the maximum amount of time available, standard and overtime rates for resources are available, accrual methods, and textual descriptions of the resources.

9. Planning

- The PMIS allows the user to define the activities that need to be performed.
- The system allows an activity or task list to be maintained. For each task, the user can provide a title, a start date, a finish date, comments, and estimated durations .

10. Project Monitoring and Tracking

- Tracking progress, actual costs, and actual resources used is one of the fundamental components of the PMIS.
- The user is allowed to define a baseline plan and compare actual progress and costs with those in the baseline plan

11. Scheduling

• A PMIS builds Gantt charts and network diagrams based on the task and resource list and all of their associated information. Any modifications to these lists will automatically be reflected in the schedules.

12. Security

- A PMIS provides password access to individual project files, and password access to specific data.
- Some people have access to information on their project only, others have input and read-only privileges, others may modify documents, etc.

13. Sorting and Filtering

- Sorting allows the user to view information in a desired order, such as pay rates from highest to lowest, resource names in alphabetic order, or task names in alphabetic order.
- A PMIS allow multiple levels of sorting (for example, by last name and then by first name)

14. Pert Analysis

• One very important feature of a PMIS is the ability to perform PERT analysis. This feature allows the user to explore the effects of various scenarios

Project Management

- PM is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
- Project management is different to the 'Design Process' that you are already familiar with.
- Project management helps to reach agreements on 'boring' activities planning, tasks, authority and responsibilities before the assignment even gets off the ground.

Key elements of project management include:

There are persons in each project who he/she involves in it directly or will profit from its results that they are called benefit users.

- Project leader; is project manager who he/she is headed on the project.
- Project team members; they are production output of the project that they participate in project management
- Supervisor: is a person from management as interface between management and project leader
- A customer:-is an individual or group project that accept final outputs of the project as product
- Resource management: providing the necessary resources, especially human resources project.

The PMIS may be divided in to four categories of information.

- 1. Organizational guidance or support information :
- Project management manual
- Project management methodologies
- Organizational polices for projects
- Organizational procedures for projects
- Organizational briefings on project capabilities and implementation

2. *Historical information:*

- Files from other projects that contain performance data and best practices
- Proposal, quotes, and bids on this project
- •Budgets, schedule, and technical performance measures from prior projects
- Project plans from prior projects
- Marketing presentation for this project

3. Current project information:

- Contracts for easy access by the project manager
- Project charter
- Specifications on the project's product
- Statements of work
- Drawings, schematics, and illustrations related to the project
- Schedules
- Risk assessments
- Risk plans
- Communication plans
- Project correspondence
- Project internal policies and procedures
- Resources lists (human and nonhuman)

- Approved vendor (marketer) list
- Names and addresses of key organization people
- Stakeholder management plan
- Functional or operational plans prepared by the functional departments
- Project diary
- Product standards
- Time cards for project team
- Briefings
- Issue log
- Action item log
- Lessons learned

4. Old files from the current project that are no longer needed for the project's ongoing work could contain:

- Old or superseded materials (schedules, briefings, expenditures, plans)
- Records of former project team participants
- Closed out contracts or closed invoices
- Inactive files for correspondence
- Superseded policies, procedures, standards, and decision

papers

USES OF THE PMIS

The objective of an information system is:

- To provide the basis to plan, monitor, do integrated project evaluation, and show the interrelationships among cost, schedule, and technical performance for the entire project and for the strategic direction of the organization.
- The information should provide a prospective view in order to identify project problems before they occur, so they can be avoided or their results minimized.
- Information is required so that the project team can continuously monitor, evaluate, and control the resources used on the project.
- As a clearinghouse for information, the facility provides *database searches and assists users in deciding which products and services to use*.

6.2 Characteristics and attributes of PMIS

These characteristics and attributes are the following:

1. Accurate: Information in the PMIS should be accurate and <u>represent the situation</u>.

• Erroneous information can lead to wrong decisions and failed projects.

Accurate information provides the best chance for managing by fact.

2. *Precise:* The precision of the information needs to be only to the level of granularity dictated by the project decisions.

- *3. Reliable:* the information must be derived from a source that gives confidence that it is real and representative of the situation.
- Information from an unknown source or stated in terms that permit more than one interpretation should be labeled "questionable."
- 4. Level of detail: the information should be at a level of detail that permits easy translation to the current project.
- Too much detail masks the purpose and too little detail is not supportive of the project team.

5. *Graphics, pictures, and illustrations:* the use of graphics, pictures, and illustrations can *convey information more quickly than narrative text*.

- These items can be supplemented with textual descriptions or highlights.
- *6. Mathematics and numbers:* mathematics and numbers are a precise means of providing information.
- These are especially good to use for performance measures or product performance requirements.

- The PMIS is an essential part of the project and critical to making the project successful.
- It takes <u>an initial effort</u> to provide the organizational and historical information as well as the project planning data.
- Once the PMIS is activated for a project, that project assumes *responsibility for sustaining* the system.
- It soon *becomes outdated and loses its effectiveness* <u>if</u> new information is not entered on a timely basis.
- Files and documents that establish the project baseline should not be deleted, but placed in an archive when new files or documents supersede them.
- It is important to maintain the superseded copy for reference when questions arise as to why something was accomplished in a certain way.

SHARING INFORMATION

- It is becoming more common for project information to be shared with the project stakeholders
- When project problems, successes, failures, challenges, and other issues are brought to the attention of the project stakeholders, there will likely be closer identification of the people with the project.
- The sharing of information can promote trust, empathy, and more mature relationships among project stakeholders.
- Then, too, as the project stakeholders review information on the project, such as the problems that the project faces, they may have suggestions that *can contribute to the solution of the problems*.

• By using technology and a willingness to communicate, information systems can be designed for the project team that help everyone *do a better job of making and implementing decisions in the utilization of project resources*

Every project manager has to ask key questions about the quality and quantity of information available to manage the project:

- What information do I need to do my job as project manager?
- What information must I share with the project stakeholders to keep them informed on the status of the project?
- What information do I need about other projects in the organization that interface with my project?

General characteristics that should be in all PMISs would include the following:

- Be adaptable to differing customer requirements.
- Be consistent with organizational and project policies, procedures, and guidelines.
- •Minimize the chances that managers will be surprised by project developments.
- Provide essential information on the cost-timeperformance parameters of a project and on the interrelationships of these parameters, as well as the strategic fit of the project.

- •Provide information in standardized form to enhance its usefulness to all managers.
- Be decision oriented, in that information reported should be focused toward the decisions required of the managers.
- •Be exception oriented, in that it focuses the manager's attention on those critical areas requiring attention rather than simply reporting on all areas and requiring the managers to devote attention to each.
- Be a collaborative effort between users and analysts.
- Be executed by a multidisciplinary team that views the design, development and implementation of the information system as a project itself, amenable to project management approaches.

Project Risk Management and Fall-back solutions

- **Risk management :**means identifying and managing uncertainties to delivery of objectives, not managing issues that might be constant.
- Risk is defined as an event that has a probability of occurring, and could have either a positive or negative impact to a project should that risk occur.
- A risk may have one or more causes and, if it occurs, one or more impacts.
- A risk is any area of uncertainty that represents a threat or an opportunity to the project.

Categories of project risks

- **1.People risks** are associated with the availability, skill level, and retention of the people on the development team.
- **2.Size risks** are associated with the magnitude of the product and the product team.
- **3.Process risks** are related to whether the team uses a defined, appropriate product development process and to whether the team members actually follow the process.
- **4.Technology risks** are derived from the software or hardware technologies that are being used as part of the system being developed.

5.Tools risks, similar to technology risks, relate to the use, availability, and reliability of support products used by the development team, such as design software, and other Computer-Aided Software Engineering (CASE) tools.

6. Organizational and managerial risks are derived from the environment where the product is being developed.

7.Customer risks are derived from changes to the customer requirements, customers' lack of understanding of the impact of these changes,

- **8. Estimation risks** are derived from inaccuracies in estimating the resources and the time required to build the product properly.
- **9. Sales and support risks** involve the chances that the team builds a product that the sales force does not understand how to sell or that is difficult to correct, adapt, or enhance.
- **10. Spontaneous and sporadic risk identification** is usually not sufficient.
- There are various risk elicitation techniques the team can use to systematically and proactively surface risks

Risk Management fall back solution Process

• The following are the process of risk managing:-

1. Risk identification

- Identify the major elements in managing project risk. Identifying the sources of risk by category is another method for exploring potential risk on a project.
- Some examples of categories for potential risks include the following:
- Cost
- Schedule
- Client
- Contractual
- Weather
- Financial
- Political
- Environmental
- People
- Technical

- **2. Risk prioritization -** what is the priority of each risk? The urgency and importance of a risk is not the same thing deal with the urgent risks quickly, deal with the important risks comprehensively.
- Describe the processes for identifying project risk. "Using a Risk Breakdown Structure in Project Management," the same framework as the work breakdown structure (WBS) for developing a risk breakdown structure (RBS).
- **3. Risk evaluation -** what is the impact of each risk should it occur? What impact might they have on benefits, time, cost, quality, reputation, people, etc. How likely is it that these risks will occur?
- The probability and impact can both be scored, e.g. using a High/Medium/Low scale.

4.Risk management planning - do you have a strategy for mitigating the risks you have identified and preventing the project from being derailed? What actions and resources will you need to reduce the impact and/or probability of the risk happening?

- What is a successful project?
- According to Baccarini, project success consists of two separate components, namely project management success and project product success.
- **Project management success** focuses on the project management process and in particular on the successful accomplishment of the project with regards to cost, time and quality.

- **Project product success** focuses on the effects of the project's end-product.
- Even though project product success is distinguishable from project management success, the successful outcomes both of them are inseparably linked.
- 'If the venture is not a success, neither is the project'.
- According to Baccarini, project success can be summarized as:
- Project success = Project Management Success + Project
 Product Success

Main Causes of Project Failure

- Poor Preparation: Clear picture of what is going to do, in advance

 as much as possible. Knowing what project success looks like at
 the beginning and do not lose focus of it.
- Inadequate Documentation and Tracking: This is the responsibility of the project manager. Tracking milestones is how you are going to know whether you are meeting expectations.
- **Bad Leadership:** When we see this word, leader, we usually think, the project manager. However, the people at each management-level have a responsible to ensure that the project is successful.
- Failure to Define Parameters and Enforce Them: When you are a leader, PM, it is imperative that you are able to work well with your team.

- **Inexperienced Project Managers:** A project manager has a lot of responsibility.
- You need to assign people to management roles who have matching education and experience.
- **Inaccurate Cost Estimations :** There may be times when your cost estimates are completely off.
- Little Communication at Every Level of Management: Whether it is between upper management, middle or with the team, it is disastrous to have poor communication.
- Everyone should feel free to come forward to express their concern or give suggestions.
- **Disregarding Project Warning Signs:-** When a project is on the verge of failing, there will have always been warning signs.
- Taking action immediately can save the project.

Chapter six project implementation

- Implementation refers to a cycle of steps taken to deliver activities, outputs, results and impacts while managing finances and for risk Implementation refers to a cycle of steps taken to deliver activities.
- Project implementation phase covers the period starting from the time decision is made to invest the project up to the start of normal production
- Project analysts generally divide the implementation phase into three different time periods. These are:
- *The investment period*: when the major project investments are undertaken.
- *The development period*: when the project's production builds up.
- *The life of a project*: when full development is reached.

The common constrains in implementation could be

- Lack of adequate knowledge about the Banks (Creditors) guidelines on project implementation procedures, such as disbursement, procurement and selection of contractors.
- Inappropriate technology choice.
- Shortage of qualified and experienced personnel.
- High cost of input (feed shortage for livestock projects
- Natural calamities caused by flash floods, road blots due to landslides, and disruption of the operation of important service facilities.
- Unhealthy atmosphere created by political upheaval in the project area
- (labor strike, change in government etc.).
- Corruption.

Project Organization

- Organization is a social entity that has a collective goal and is linked to an external environment.
- The purpose of an organization to coordinate the efforts of many to accomplish goals.
- Projected organization is a project focused organizational structure where project manager has the final authority over the project to make project decisions, priorities, acquire and assign resources.
- A Projected organization refers specifically to an organizational structure that has been set up in a manner in which the project manager leads the group and in which the project manager has the ultimate authority to make any and all decisions involving the organization.

Types of project organizations

1. Matrix Organization

• It is used mainly in the management of large projects or product development processes, drawing employees from different functional disciplines for assignment to a team without removing them from their respective positions

2. Hybrid Organization

- Hybrid organizations are those that combine the three elements of people, workplace and technology in equal measure.
- A successful organization would be one that empowered its people to work in the way they would be most productive, allowing them to be measured by outputs empowered through innovative and flexible workplace design and a range of technologies and tools that help them do their jobs more effectively

3. Cellular organization: Small work groups with people skilled in each required task were organized together.

Liaisons: are used to integrate two groups not part of the same organization, useful between the people who fund the project and the project team.

• Task forces: Temporary grouping of individuals to solve a particular problem.

Resource leveling

- Leveling refers to the even allocation of resources.
- When you assign more resources to a task than you have available the resource is said to be over-allocated and requires leveling.
- Sometimes over-allocation is also referred to as a resource conflict simply have too much work for a resource to do.
- Resource conflicts occur normally when entering the resources against the tasks.
- It is not noticed that the same resource is required in more than one place.
- The process of resolving these over-allocations is called leveling (although Project spells it as Leveling).

Project Budget Revision based on resource schedule

- The budget section should give a complete picture of the project cost structure, including cost estimates for all of the inputs and resources need to make project successful.
- During the conceptual phase when project selection occurs, economic factors are an important consideration in choosing between competing projects.
- The budget should be broken down by year or months as well as for the life of the project.

- Establishing a Budget Once broken project down into activities will able to calculate the overall project costs by estimating and totaling the individual activity costs.
- This process of subtotaling costs by category or activity is called cost aggregation.
- The process of matching the schedule of transfers with the schedule of activity payments is called reconciliation.

Estimating Costs to Compare and Select Projects

- During the conceptual phase when project selection occurs, economic factors are an important consideration in choosing between competing projects.
- To compare the simple paybacks or internal rates of return between projects, an estimate of the cost of each project is made.
- The methods used to estimate the cost of the project during the selection phase are generally faster and consume fewer resources than those used to create detailed estimates in later phases.

Classification of Estimating Costs to Projects

1. Analogous Estimate

- An estimate that is based on other project estimates is an analogous estimate.
- If a similar project cost a certain amount, then it is reasonable to assume that the current project will cost about the same.
- **2. Parametric Estimate:-**If the project consists of activities that are common to many other projects, average costs are available per unit.
- For example, if you ask a construction company how much it would cost to build a standard office building, the estimator will ask for the size of the building in square feet and the city in which the building will be built.
- Estimates that are calculated by multiplying measured parameters by cost-per-unit values are parametric estimates

- **3.Bottom-Up Estimating:** The most accurate and time-consuming estimating method is to identify the cost of each item in each activity of the schedule, including labor and materials.
- If you view the project schedule as a hierarchy where the general descriptions of tasks are at the top and the lower levels become more detailed, finding the price of each item at the lowest level and then summing them to determine the cost of higher levels is called bottom-up estimating.
- This type of estimate is typically more accurate than an analogous or parametric estimate.
- **4.Activity-Based Estimates:** An activity can have costs from multiple vendors in addition to internal costs for labor and materials.
- Detailed estimates from all sources can be reorganized so those costs associated with a particular activity can be grouped by adding the activity code to the detailed estimate.

Project Exit Strategy

- In its broadest sense an exit strategy is a strategy for designing, implementing, and ending external support in a manner consistent with the objective of producing sustainable development outcomes.
- In order to qualify as a strategy, the exit strategy must contain: Criteria for exiting; measurable benchmarks of progress in meeting the criteria; a time line for the exit process; action steps and responsible parties; and mechanisms to assess progress.

Approaches in exit strategies

• Literature on exit strategies identify three approaches to exit: such as Phase down, phase over and phase out.

1. Phase down

- Phase down refers to gradual reduction of programme activities, utilizing a local organization to sustain program benefits while the original sponsor deploys fewer resources.
- Phasing down is often a preliminary stage to phasing over and/or phasing out.

2. Phase out

- Under this approach a sponsor withdraws from involving in a programme without turning it over to another institution for continued implementation.
- Ideally, a programme is phased out after permanent or self sustaining changes are realized eliminating the need for additional external support.

3. Phases over

- Under this approach, a sponsor transfers programme activities requiring continued inputs to community based organizations (CBOs), informal groups or networks or key individuals.
- During programme design and implementation, emphasis is placed on institutional capacity building so that the services provided can continue through local organizations.

Chapter seven project Monitoring and evaluation

- <u>Monitoring and evaluation</u> are important management tools to track the project progress and facilitate decision making.
- While some funders require some type of evaluative process, the greatest beneficiaries of an evaluation can be the community of people with whom the organization works.
- By closely examining the work, an organization can design programs and activities that are effective, efficient, and yield powerful results for the community.

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Monitoring

- Is a continuing function that aims primarily to provide the management and main stakeholders of an ongoing intervention with early indications of progress.
- Is the Periodic tracking (for example, daily, weekly, monthly, quarterly, annually) of any activity's progress by systematically gathering and analyzing data and information is called Monitoring.
- Monitoring is the process of routinely gathering information with which to make informed decisions for project management.
- Monitoring provides project managers with the information needed to assess the current project situation and assess where it is relative to specified targets and objectives identifying project trends and patterns, keeping project activities on schedule, and measuring progress toward expected outcomes.

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- monitoring provides managers and other stakeholders with regular information on progress relative to targets and outcomes.
- It is descriptive and should identify actual or potential successes and problems as early as possible to inform management decisions.
- It helps organizations track achievements by a regular collection of information to:
- assist timely decision making,
- ensure accountability, and
- provide the basis for evaluation and learning

Type of monitoring

• There are several types of monitoring and they includes, process monitoring, technical monitoring, assumption monitoring, financial monitoring and impact monitoring etc.

1.Process monitoring/ physical progress monitoring

- In process monitoring, routine data is collected and analyzed in order to establish whether the project tasks and activities are leading towards the intended project results.
- in other words, process monitoring answers the questions "what has been done so far, where, when and how has it been done?" Most of the data collected during project implementation

• Process monitoring is conducted using checklists and guidelines.

2.Technical monitoring

- Technical monitoring involves assessing the strategy that is being used in project implementation to establish whether it is achieving the required results.
- It involves the technical aspects of the project such as the activities to be conducted. In a safe water project for example, physical progress monitoring may show that there is little or no uptake of chlorination as a water treatment strategy.

3.Assumption monitoring

- Any project has its working assumptions which have to be clearly outlined in the project log frame.
- These assumptions are those factors which might determine project success or failure, but which the project has no control over.
- Assumption monitoring involves measuring these factors which are external to the project.
- assumption monitoring as it may help to explain success or failure of a project.

4.Financial Monitoring

- Just like the name suggests, financial monitoring simply refers to monitoring project expenditure and comparing them with the budgets prepared at the planning stage.
- The use of funds at the disposal of a program/project is crucial for ensuring there are no excesses or wastages.
- Financial monitoring is also important for accountability and reporting purposes, as well as for measuring financial efficiency.

5.Impact Monitoring

- is a type of monitoring which continually assesses the <u>impact</u> of project activities to the target population.
- Indeed, impacts are usually the long term effects of a project.
- However, for projects with a long life span or programs (programs have no defined timelines) there emerges a need for measuring impact change in order show whether the general conditions of the intended beneficiaries are improving.

Evaluation:

- is the <u>systematic and objective assessment</u> of an on-going or completed project, program, or policy, and its design, implementation and results.
- The aim is to determine the <u>relevance and fulfillment</u> of *objectives, development efficiency, effectiveness, impact, and sustainability.*
- It should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision making process of both recipients and donors.

Types of evaluations 1.Formative Evaluation

- (also known as 'evaluability assessment')
- is used before program design or implementation. It generates data on the need for the program and develops the baseline for subsequent monitoring.
- It also identifies areas of improvement and can give insights on what the program's priorities should be. This helps project managers determine their areas of concern and focus, and increases awareness of your program among the target population prior to launch.

2.Process Evaluation

- (also known as 'program monitoring')
- Process evaluation occurs once program implementation has begun, and it measures how effective your program's procedures are.
- monitors what occurs <u>during the process</u> of program <u>planning</u> and the procedures and tasks involved in <u>implementing</u> a project.
- Helps to determine the degree to which your project has been <u>implemented as planned</u> and the <u>extent</u> to which it has reached its intended users.

3.Outcome Evaluation

- (also known as 'objective-based evaluation')
- is conventionally used during program implementation. It generates data on the program's outcomes and to what degree those outcomes are attributable to the program itself.

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- It is useful in measuring how effective your program has been and helps make it more effective in terms of delivering the intended benefits.
- Is the measurement of <u>outcomes and impact</u> over the short or long-term.
- It measures the changes that occur as a result of a project and is used to determine whether it made a difference and impacted on the factors that you wanted to address.

4.Economic Evaluation

- (also known as 'cost analysis', 'cost-effectiveness evaluation', 'cost-benefit analysis', and 'cost-utility analysis')
- is used during the program's implementation and looks to measure the benefits of the programs against the costs. Doing so generates useful quantitative data that measures the efficiency of the program.
- This data is like an audit, and provides useful information to sponsors and backers who often want to see what benefits their money would bring to beneficiaries

5.Impact Evaluation

- Impact evaluation studies the entire program from beginning to end (or at whatever stage the program is at), and looks to quantify whether or not it has been successful.
- •Focused on the long-term impact, impact evaluation is useful for measuring sustained changes brought about by the program or making policy changes or modifications to the program

6.Summative Evaluation

- is conducted after the program's completion or at the end of a program cycle. It generates data about how well the project delivered benefits to the target population.
- It is useful for program administrators to justify the project, show what they have achieved, and lobby for project continuation or expansion

7. Goals-Based Evaluation

- (also known as 'objectively set evaluation)
- is usually done towards the end of the program or at previously agreed-upon intervals.
- Development programs often set 'SMART' target. Specific, Measurable, Attainable, Relevant, and Time.
- and goals-based evaluation measures progress towards these targets. The evaluation is useful in presenting reports to program administrators and backers, as it provides them the information that was agreed upon at the start of the program

8 .**Mid-term evaluation:** This is also commonly referred to as the mid-term reviews. Just like the name suggests, the mid-term reviews are conducted mid-project.

The mid-term reviews are important for the purposes of establishing whether a project is heading towards the set goals and objectives, thereafter informing management and control decisions by the project management.

Purpose of project evaluations

- Learning from experience: With the assistance of evaluations, successes and failures can be interpreted.
- **Transparency:** Evaluations illustrate the responsible utilization of the resources and justify the results and their effects vis-à-vis the contractor, the partners, the target groups in the recipient country and the tax payers.
- **Deepening understanding**: Evaluation is a tool for deepening knowledge and understanding of the assumptions, options and limits of development cooperation
- **Improved communication:** An evaluation is intended to foster communication and understanding within and between the groups mentioned above,
- To assess effectiveness as well as efficiency of program delivery in response to particular needs of various groups which benefit from it

Strategic questions in monitoring and evaluation

- <u>Relevance</u>: Do the objectives and goals match the problems or needs that are being addressed?
- <u>Efficiency</u>: Is the project delivered in a timely and costeffective manner?
- <u>Effectiveness</u>: To what extent does the intervention achieve its objectives? What are the <u>supportive factors</u> and <u>obstacles</u> encountered during the implementation?
- <u>Impact:</u> What happened as a result of the project?

This may include *intended and unintended positive and negative effects*.

• <u>Sustainability:</u> Are there <u>lasting benefits</u> after the intervention is completed?

Common terms in monitoring and evaluation

INPUTS

The financial, human, and material resources used for the development intervention. Technical Expertise

> Equipment Funds

ACTIVITIES

Actions taken or work performed. Training workshops conducted

OUTPUTS

The products, capital goods, and services that result from a development intervention. Number of people trained Number of workshops conducted

OUTCOMES

The likely or achieved short-term and medium-term effects or changes of an intervention's outputs. Increased skills New employment opportunities

IMPACTS

The long-term consequences of the program, may be positive and negative effects. Improved standard of living

Importance of Monitoring and Evaluation

- To satisfy commissioners and sponsors
- To help you apply for funding
- To inform your future work
- To boost the profile of your work
- Motivation and satisfaction
- To add to the evidence base

Key criteria's to assess the quality of M & E

- Utility: The proposed 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.

Key principles of Evaluation

Evaluation is most effective when:

- it is a continuous (not just one-off) process informing planning and delivery as the project develops;
- it involves all those with an interest in the project in defining the questions they want answered;
- it uses imaginative and creative approaches, which engage those involved;
- it helps projects to be more accountable to the wider community;
- it is used to challenge discriminatory and oppressive policies and practice, and to overcome inequality and disadvantage;
- it highlights and celebrates successes and achievements;
- it encourages an honest appraisal of progress, so that you can learn from what hasn't worked as well as what has.

Barriers to monitoring and evaluation

- Is costly and time consuming
- •Less value provided for evaluation and reluctance on the side of stakeholders
- Lack of knowledge to carryout evaluation
- The target audience in work may have difficulty comprehending the evaluation tools that are in use

Planning for monitoring and evaluation
It should be part of project cycle
Conducting a needs assessment
Developing a research plan

key stages involved in developing a research plan

for monitoring and evaluation include:

- Choosing your method of evaluation
- Identifying and deciding on outcomes
- Setting <u>indicators</u> to demonstrate whether or not these outcomes have been met
- ♦ Deciding <u>who will conduct</u> the evaluation
- ♦ <u>Identifying appropriate research tools</u> for collecting data

STEP-BY-STEP: Planning for Monitoring and Evaluation

- **1. Identify who will be involved** in the design, implementation, and reporting.
- 2. Clarify scope, purpose, intended use, audience, and budget for evaluation
- **3. Develop the questions** to answer what you want to learn as a result of your work.
- **4. Select indicators**: are meant to provide a clear means of measuring achievement, to help assess the performance, or to reflect changes.

- 5. **Determine the data collection methods.** Examples of methods are: document reviews, questionnaires, surveys, and interviews.
- 6. Analyze and synthesize the information you obtain.
- 7. Interpret these findings, provide feedback, and make recommendations.
- 8. Communicate your findings and insights to stakeholders and decide how to use the results to strengthen your organization's efforts

Points to be considered in M & E plan

- Identifying and choosing outcomes: <u>identify clear short-term</u> or long-term outcomes from the project's aims and objectives.
- Setting indicators: Monitoring and evaluation includes both progress and outcome indicators:
 - Process indicators measure <u>on-going project activity</u> e.g. the number of people attending project events.
 - <u>Outcome indicators</u> measure whether or not anticipated outcomes have been <u>achieved</u> at the end of the project e.g. changes in people's level of physical activity

Concept	Definition	Example
Aim	The longer-term change to which the project will contribute.	To enable hard to reach groups to access green space
Inputs	Key resources needed to support the project.	Volunteers, equipment
Activities	The project activities. The activities should lead to the outputs.	Outdoor activity programme
Outputs	The tangible, direct results of the project. The outputs should lead to the outcomes.	Access to and experience of local green spaces
Outcomes	The changes that result from a project. The outcomes should contribute to the aim of the project.	Improved knowledge and awareness of local green spaces

7.6 Evaluation tools and techniques

- Once you have decided on your indicators and outcomes you will need to identify and choose suitable research tools to collect data
- **1. Quantitative methods:** involves the systematic collection of <u>numerical data</u>
- 2. Qualitative methods: The data collected is <u>non numerical</u> and may include interview transcripts, photographs or other types of observational material

Methods of data collection

Questionnaires and surveys

- **Reflective diaries:** useful for facilitators to record their experiences and feelings, which can then be fed back to project managers and used in the development of your project.
- Interviews
- Focus group discussion
- Case studies
- Visual evidence

Questions asked	Who, what, how, why?	How much, how many?
Question type	Open-ended	Closed
Interaction	Dialogue or observation	Question-answer
Form	Semi- or unstructured	Structured
To whom?	Purposeful sampling	Formal sampling
Level	In-depth	Surface-accessibility
Analysis	Interpretation	Formalisation and statistical analysis
Common methods	Interviews: • interviews • narrative • focus groups Written text: • diary methods Media analysis: • press articles • drawings or photographs • videos Observation: • participant observation • non-participant observation	Survey • questionnaires • cross-sectional (data at one point in time) • cohort (follow one group over repeated points in time) Controlled trials • random • quasi-experimental Archival data (secondary data) • further analysis of existing statistics Observation • counts e.g. people participating in a project ₁₉₇ activity

Data analysis and sharing findings

- 1. Analyzing the evidence: should answer the questions
 - Does the information gathered show that you have reached your goals?
 - What are the project outcomes? (Be aware that outcomes may be both desirable and undesirable.)
 - Does the information gathered highlight any achievements?
 - Are there any problems or issues that need to be addressed?

2.Steps in data analysis

1 Reflecting

Think back to your evaluation questions and why you are doing the evaluation, who is it for, and what do they want to know about your project? Consider your outcomes and indicators of success.

2 Collating

This involves bringing together the information into a workable format. Quantitative data may need to be organised through statistical analysis or using basic calculations (e.g. total numbers, averages, percentages of the total). Qualitative information needs to be organised thematically; the term 'thematic analysis' is used to describe the process of identifying key themes or patterns.

3 Describing

You should provide a description of the facts which have emerged from the information gathered e.g. what was delivered, how much, who to, when and where. Remember to describe both positive and negative findings.

4 Interpreting

Interpreting goes beyond describing the facts, to try and understand the significance of your data and why things happened as they did. Look at internal and external factors which contributed to the project's achievements; also consider any challenges or difficulties encountered.

5 Conclusions and recommendations

Draw out conclusions based on the strengths and weaknesses of the project. You can then begin to make recommendations for building on these strengths and addressing areas for improvement.

3. Sharing the findings of your evaluation with other organizations

Its benefits include:

- Groups can learn from one another about different methods of evaluation
- Problems experienced during evaluation can be shared
- Enabling you to make contact and connections with other individuals, groups and organizations with similar projects to your own, creating networks of likeminded project
- Individuals within groups are likely to have different areas of expertise and interest and may be willing to share their skills with other groups.