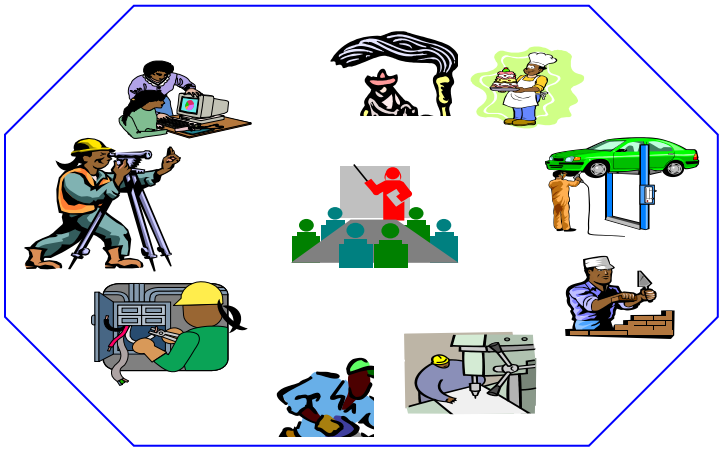
Natural Resource Conservation and Development-IV



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Module Title: Developing Participatory Management Plan for a Designated Area

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Table of content **page**

LG #23	**LO1: Define the need for a participatory management plan**

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Participatory management plan objectives
- Consultation with client.
- Identification of Planning team

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Identify participatory management plan objectives for the designated area
- Agree terms of reference in consultation with client.
- Identify planning team including specialists and communities

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If your performance is satisfactory proceed to the next learning guide,
7. If your performance is unsatisfactory, see your trainer for further instructions or go back to “information sheets”.

Information Sheet 1- Participatory Management Plan objectives

Introduction

Designated area is Areas kept inviolate from human interference so that future comparisons may be possible with localities that have been affected by human activities

- It is a representative example of major terrestrial, including glacial and aquatic, ecosystems and marine ecosystems
- Areas with important or unusual assemblages of species, including major colonies of breeding native birds or mammals
- The type locality or only known habitat of any species
- Areas of particular interest to ongoing or planned scientific research
- Examples of outstanding geological, glaciological or geomorphologic features
- Areas of outstanding aesthetic and wilderness value
- Sites or monuments of recognized historic value and Such other areas as may be appropriate to protect the outstanding environmental, scientific, historic, aesthetic or wilderness values, any combination of those values, or ongoing or planned scientific research.

The designation of an area as a protected area provides the area with a higher level of protection beyond that achieved by other forms of planning and management measures under the Protocol in order to achieve specific protection aims and objectives.

Management - Management consists of decision-making activities undertaken by one or more individuals to direct and coordinate the activities of other people in order to achieve results which could not be accomplished by any one person acting alone. Effective management focuses on group effort, various forms of coordination, and the manner of making decisions. Management is required whenever two or more persons combine their efforts and resources to accomplish a goal which neither can accomplish by acting alone. Coordination is necessary when the actions of group participants constitute parts of a total task. If one person acts alone to accomplish a task, no coordination may be required; but when that person delegates a part of the task to others, the individual efforts must be coordinated.

Participation- is the general term used to describe the involvement of groups and individuals in the decision-making process. There are many interpretations of this term and levels of participation possible, over time, management planning approaches have moved from very limited levels of participation to much more inclusive levels. However, the type of involvement chosen will depend very much on what the management agency hopes to achieve and how 'free' it is to involve others in the decision-making process. Many organizations are bound by their legislative or political mandate and unable to deviate from this. However, there will almost always be matters of detail and decisions on 'how' this mandate is to be met that could and should allow scope for participation with stakeholders.

1.1. Participatory Management Plan

In simple terms, a Management Plan is a document which sets out the management approach and goals, together with a framework for decision making to apply in the designated area over a given period of time. Plans may be more or less prescriptive, depending upon the purpose for which they are to be used and the legal requirements to be met. The process of planning, the management objectives for the plan and the standards to apply will usually be established in legislation or otherwise set down for protected area planners.

Management Plans should be succinct documents that identify the key features or values of the protected area, clearly establish the management objectives to be met and indicate the actions to be implemented. They also need to be flexible enough to cater for unforeseen events which might arise during the currency of the plan. Related documents to the Management Plan may include more detailed zoning, visitor and business plans to guide its implementation. However, the Management Plan is the prime document from which other plans flow, and it should normally take precedence if there is doubt or conflict

The process of developing a Management Plan may be more or less complex de - pending upon the objectives of the protected area, the risks or threats to these objectives, the number of competing interests, the level of stakeholder, involvement and the issues arising from outside the protected area. Whether the plan is simple or

complex, sound planning principles should be applied to guide the planning process and ensure that the completed Management Plan is a thorough and useful document

Management by objectives- In the broader field of management science, the style of management brought about by management planning is known as 'management by objectives. Management by objectives is proactive rather than reactive. It is also 'results-oriented', emphasizing accomplishments and outcomes. It is an approach that encourages active management by the organization and is adopted by most well-regarded protected area agencies.

Four distinct steps have been identified within this type of management and decision making:

- Formulation of clear, concise statements or objectives
- Development of realistic action plans for their attainment (including an analysis of threats to attaining the objectives)
- Systematic monitoring and measuring of performance and achievement and
- Taking corrective actions necessary to achieve planned results.

Management plan objectives Comprise:

- Management plans define the core principles, objectives and responsibilities of the managing agent.
- Cover the allocation of enterprise resources, and set parameters for resource access and use.
- Objectives to provide habitat for wildlife and native predators (such as insect eating birds, parasitic wasps).
- Maintain biodiversity, moderate local weather conditions (e.g., wind speed, rainfall run-off, water table recharge, provide shade).
- Selective removal of tree limbs for firewood and timber.
- Selective harvest of seed for re-vegetation or human consumption.
- Genetic resource for plant propagation and medicinal components
- Contribution to sustainable land use, aesthetic contribution to enterprise (such as a home-stay farm, for tourism).

1.1.1. Principles of management

Management principles are guidelines for the decisions and actions of managers. They were derived through observation and analysis of events faced in actual practice. The Principles of Management are the essential, underlying factors that form the foundations of successful management. According to of management these can be used to initiate and aid the processes of change, organization, decision making, skill management and the overall view of the management function.

Division of Work

According to this principle the whole work is divided into small tasks. The specialization of the workforce according to the skills of a person, creating specific personal and professional development within the labor force and therefore increasing productivity; leads to specialization which increases the efficiency of labor. By separating a small part of work, the workers speed and accuracy in its performance increases. This principle is applicable to both technical as well as managerial work. This can be made useful in case of project works too. Planning is to decide what to do before

Authority and Responsibility

The issue of commands followed by responsibility for their consequences. Authority means the right of a superior to give enhance order to his subordinates; responsibility means obligation for performance. This principle suggests that there must be parity between authority and responsibility. They are co-existent and go together, and are two sides of the same coin. and the authority must be commensurate with responsibility. the process is also done.

Discipline

Discipline refers to obedience, proper conduct in relation to others, respect of authority, etc. It is essential for the smooth functioning of all organizations. This will also help shape the culture inside the organization. discipline is absolutely necessary functioning of all enterprises.

Unity of Command

This principle states that each subordinate should receive orders and be accountable to one and only one superior. If an employee receives orders from more than one superior,

it is likely to create confusion and conflict, Unity of Command also makes it easier to fix responsibility for mistakes and the authority should be commensurate with responsibility

Unity of Direction

All those working in the same line of activity must understand and pursue the same objectives. All related activities should be put under one group, there should be one plan of action for them, and they should be under the control of one manager. It seeks to ensure unity of action, focusing of efforts and coordination of strength.

Subordination of Individual Interest

The management must put aside personal considerations and put company objectives firstly. Therefore, the interests of goals of the organization must prevail over the personal interests of individuals.

Remuneration

Workers must be paid sufficiently as this is a chief motivation of employees and therefore greatly influences productivity. The quantum and methods of remuneration payable should be fair, reasonable and rewarding of effort. Remuneration is paid to worker as per their capacity and productivity. The main objective of an organization is to maximize the wealth and the net profit as well. For this purpose, the organization has paid wages, salary, and benefit to their staff properly and scientifically so that organizational efficiency can be ensured.

Degree of Centralization

The amount of power wielded with the central management depends on company size. Centralization implies the concentration of decision-making authority at the top management. Sharing of authority with lower levels is called decentralization. The organization should strive to achieve a proper balance.

Scalar Chain

Scalar Chain refers to the chain of superiors ranging from top management to the lowest rank. The principle suggests that there should be a clear line of authority from top to bottom linking all managers at all levels. It is considered a chain of command. It involves a concept called a "gang plank" using which a subordinate may contact a superior or his superior in case of an emergency, defying the hierarchy of control. However, the immediate superiors must be informed about the matter.

Order

Social order ensures the fluid operation of a company through authoritative procedure. Material order ensures safety and efficiency in the workplace. Order should be acceptable and under the rules of the company

Equity

Employees must be treated kindly, and justice must be enacted to ensure a just workplace. Managers should be fair and impartial when dealing with employees, giving equal attention towards all employees.

Stability of Tenure of Personnel

The period of service should not be too short and employees should not be moved from positions frequently. An employee cannot render useful service if he is removed before he becomes accustomed to the work assigned to him.

Initiative

Using the initiative of employees can add strength and new ideas to an organization. Initiative on the part of employees is a source of strength for organization because it provides new and better ideas. Employees are likely to take greater interest in the functioning of the organization.

Esprit de Corps

This refers to the need of managers to ensure and develop morale in the workplace; individually and communally. Team spirit helps develop an atmosphere of mutual trust and understanding. Team spirit helps to finish the task on time

Self-check 1	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (12 point)

1. Define Designated area. (2pts)
2. List the four distinct steps of management and decision-making process (4pts)
3. Mention at least six principles of management (6pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 2- Consultation with client.

Consulting people is not a new idea. What is new is the growing prominence and frequency of consultation activities, particularly those involving large numbers of participants. As the prominence of consultation increases, it is sometimes unclear precisely how client consultation helps managers make better decisions. Managers need to know that, and how to design the consultation process accordingly.

Client consultation is linked to the measurement of client satisfaction. You must identify the gaps between what clients expect or need from the organization and the service they feel they are actually receiving.

In the context of delivering quality services, consultation is a process that permits and promotes the two-way flow of information between clients of government services and the government.

Client may include, Government agency or associated body, private landholder/farmer, or community group

Goal and Objectives

The goal of client consultation is to discover your clients' opinion of the services they receive from your department and the way these services are provided. The objectives of consultation may range from sharing information to developing and implementing solutions to a problem. All participants must understand the objectives of the consultation from the outset.

Rationale

You should consult with your clients in order to

- seek improvements to delivering quality services;
- increase their satisfaction with the service rendered;
- better understand their needs for and expectations of the services you provide;
- help them understand the services you provide;

- manage their *expectations* where these exceed the organization's limitations or mandate; and accommodate their desire to be consulted about the services they receive.

Client consultation allows you to

- devise public policy solutions;
- improve service, and reduce or eliminate services that clients do not value;
- meet emerging client needs;
- build partnerships; and
- target high service priorities so that you can allocate resources efficiently and effectively.

Success Factors

The fundamental elements for meaningful and credible consultations are:

- Shared understanding of the purpose
- Integrity, mutual respect and trust
- Clear, open and transparent communication
- Opportunity for clients to influence the decision-making process
- Commitment to respond to expressed client needs and concerns
- Involvement of staff at all levels
- Management accountability
- Valid tools and methods and
- Sufficient resources

1.1. Client Consultation Process

The approach to consultation will vary according to the issue as well as to time and resource constraints. In the ideal consultative process, managers and those involved at the initial stages of the exgercise are still there at the end and are held accountable for implementing the outputs. They ensure the outputs are translated into actions as quickly as possible and that a feedback mechanism is put in place to follow up on the consultation.

To develop and implement a client consultation, you should follow these key steps, of which pre-consultation is perhaps the most important.

Identify services and clients

- Identify the services about which you want to consult.
- Identify the internal and external clients for each service.

Begin pre-consultation

- Determine the issue, mandate and objective.
- Set the ground rules for the process and subsequent talks.
- Identify the players, ensuring a representative selection of *both* users and stakeholders.
- Agree on timeframes.
- Determine resources available.
- Ensure that public opinion research approval and contracting follow Treasury Board policy.

Pre-consultation may include:

- a client pre-survey;
- a review of existing records and information;
- focus groups with front-line staff who have direct contact with clients; and
- Client focus groups that reflect the diversity of clients.

Determine measurement techniques

These may include:

- interview methods;
- questionnaire/survey methods;
- ongoing feedback mechanisms;
- focus groups that reflect diversity of clients; and
- Polling.

Self-check 2	Written test

Name_____ ID_____ Date _____

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test II: Short Answer Questions (12 pts)

1. Discuss the fundamental elements for meaningful and credible consultations. (2pts)
2. What client (2 pts)
3. List some organization/ client who has a role in NRM (5pts)
4. How do you identify your client? (3pts)

You can ask you teacher for the copy of the correct answers

Note: Satisfactory rating – 6 points Unsatisfactory - below6 points

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Information Sheet 3. Identification of Planning team

3.1. Planning team

When building the planning team, start with existing community, organizations or committees if possible. For mitigation plan updates, reconvene the team from the previous planning process along with any additional individuals or organizations. A committee that oversees the comprehensive plan or addresses issues related to land use, transportation, or public facilities can be a good foundation for your mitigation planning team. You may consider how threats and hazards impact economic development, housing, health and social services, infrastructure, or natural and cultural resources to determine what agencies and offices to include. You could also build on your community's existing Local Emergency Planning Committee (LEPC). This group deals with hazardous materials safety and may also address other threats and natural hazards issues. In small communities, LEPCs may be comprised of the same people and organizations that are needed for the mitigation planning team.

A planning team should be established to guide the preparation of the plan at the outset of the process. The team's role will be to understand and describe the purposes of the park and to formulate guidelines for the protection, use, development and interpretation of its resources.

To be successful, the planning team should:

- be interdisciplinary and contain experts with different professional backgrounds, e.g. ecologists, landscape architects, park planners, social scientists (such as sociologists and anthropologists), resource managers, engineers and technical experts. The expertise required will depend on the circumstances of the protected area, its socio-economic conditions, and the management issues and prescriptions to be developed
- involve the management and staff from the protected area in question
- include other staff from within the organization (district, regional or Head Office staff) to provide guidance on policy, regional and national context
- possess insight and imagination. Its members should have the ability to think creatively and solve problems. Team members should also possess the skills

needed to communicate their ideas and values to each other and to external interests

- include local people on the team where feasible and appropriate. They will be able to contribute knowledge of local conditions and their involvement should encourage the acceptance of the plan by local communities

Three key responsibilities must be assigned to members of the planning team:

1. Someone to co-ordinate and organize production of the plan, i.e. a project manager;
2. Someone to advise on the planning process, the approach to be taken, the methods to be used, i.e. a planner/planning adviser;
3. Someone to draft the plan, or to have editorial control if different sections are contributed by different people, i.e. an author/editor

Documentation of the Planning Process – Planning Team

The plan document is the written record of the planning process and must describe how the plan was prepared for each jurisdiction, including the schedule and activities that made up the plan's development as well as who was involved in the process. The plan can also document how the planning team members were selected and describe each team member's contribution to the planning effort.

Multi-jurisdictional plans must identify who represented each jurisdiction, including the person's position or title and agency, at a minimum. Since the plan is intended to provide a resource for the community, the planning process should provide enough detail to allow those updating the plan to identify and coordinate with those agencies that were involved in the process.

Plan updates must include documentation of the current planning process undertaken to update the plan.

The "Planning Process

- Overview of Hazard Mitigation Planning
- History of Hazard Mitigation Planning
- Preparing the Plan
- The Planning Team
- Community Meetings and Workshops
- Involving the Public

- Involving Stakeholders
- Multi-jurisdictional Participation
- Progress Report

Identification of strategic plan

Environmental Protocol states that any area, including any marine area, may be designated to protect outstanding environmental, scientific, historic, aesthetic or wilderness values and sets out a series. In all cases the description of values should provide sufficient detail to enable readers to understand precisely what the designation is intended to protect.

Strategic plan establishes what is intended to be achieved by the Management Plan and how the Plan will address protection of the values described above.

For example, the aims of the Plan might highlight an intention to:

- Avoid certain specified changes to the area;
- Prevent any human interference with specified features or activities in the area;
- Allow only certain types of research, management, or other activities that would not interfere with the reason for the site's designation; or
- Minimize, to the maximum extent practicable, the introduction of non-native species, which could compromise the environmental and scientific values of an area.

It is important to note that the description of values and the objectives will be used by the national permitting authority to help decide activities that can, and cannot, be authorized to be conducted in the Area. Consequently, the values to be protected and the objectives of the plan must be described specifically, not generally.

Self-Check –3	Multiple choice

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Multiple choice. (9 point)

1. The aims of strategic Plan might highlight an intention to one of the following
   A. Avoid certain specified changes to the area;
   B. Prevent any human interference with specified features or activities in the area;
   C. Allow only certain types of research, management
   D. All
2. When building the planning team, start with one of the following
   A. Community B. organizations C. committees D. All
3. Environmental Protocol states that any area, including any marine area may be designated to protect one of the following except
   A. Outstanding environmental B. Scientific
   C. Wilderness values D. None

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

LG # 24	LO2: Undertake Preliminary Planning Activities

Instruction sheet
This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics: • Identification of major stakeholders. • Availability of specialists in management planning • Timelines for development of the participatory management • Identification of resources for development of management strategies This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, **you will be able to**: • Identify major stakeholders in line with the objectives of the project. • Ascertain availability of specialists to assist in management planning work • Establish timelines for development of the participatory management plan and reporting arrangements to client. • Identify and organize Resources required for the development of management strategies are and partnerships
Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If your performance is satisfactory proceed to the next learning guide,
7. If your performance is unsatisfactory, see your trainer for further instructions or go back to “information sheets”.

Information Sheet 1- Identification of Major Stakeholders.

Introduction

Stakeholders are individuals, organizations and others who:

- are in a position to influence the organization's work or place demands on it.
- are affected by or can affect the work of the organization
- have an interest in the organization's work or can lay claim to an interest.

Undertaking a stakeholder analysis can help to:

- Identify who has a say about the organization's work and their relative importance.
- Clarify the content and scope of others' influence.
- Highlight any tensions and contradictions in the demands being made on the organization.
- Help an organization to clarify its mandate. It is particularly important to consider the position of any stakeholders whose interest is not clear, or is changing.

1.1. Major Stakeholders.

Natural resource management specifically focuses on a scientific and technical understanding of resources and ecology and the life-supporting capacity of those resource**.** Therefore, it is dependent upon the circumstances of the stakeholders involved with natural resource as to which definition and subsequent theory is utilized.

Stakeholder mapping involves identifying key stakeholders who are willing and able to support the community's vision and mission. You will need to find stakeholders who share the community's vision and whose goals are aligned to the community's. In order to identify the correct people that will support the community's efforts, you will need to assess and analyze the environment of your community finds itself in so that you know who you need to engage with in order to meet the community's needs.

At the start of a stakeholder mapping session, the facilitators should clearly explain:

- Who the actors represented on the map are;
- What type of linkages should be represented
- What level of detail is needed

The aims of stakeholder analysis

- Identify and categories the stakeholders that may have influence
- Develop an understanding of why changes occur
- Establish who can make changes happen
- How to best manage natural resources

This gives transparency and clarity to policy making allowing stakeholders to recognize conflicts of interest and facilitate resolutions.

Stages in Stakeholder analysis

Stage 1. Clarify objectives of the analysis

Stage 2. Place issues in a systems context

Stage 3. Identify decision-makers and stakeholders

Stage 4. Investigate stakeholder interests and agendas

Stage 5. Investigate patterns of inter-action and dependence

Stakeholder power analysis

Stakeholder power analysis is particularly useful for assisting in decision-making situations where various stakeholders have competing interests, resources are limited, and stakeholder needs must be appropriately balanced. As well as evaluating existing policies and institutions, it can be used to appraise possible scenarios.

It is about asking questions like:

- Whose problem?
- Who benefits?
- Who loses out?
- What are the power differences and relationships between stakeholders?
- What relative influence do they have?

Particular skills and attitudes may be needed to conduct stakeholder power analysis. Some of these may be hired in or trained, but others can only be acquired through experience:

- Two-way communication – getting views across, and listening to those of others
- Respect of and for other stakeholders
- Cultural and gender awareness
- Chairing of meetings and workshops

- Facilitation of processes involving several stakeholders
- Trust and consensus building, and conflict management
- Developing enthusiasm, transparency and commitment
- Patience – it takes time for stakeholders to consult with their own constituencies

How to carry out stakeholder power analysis – a step-wise approach

Step 1. Develop purpose and procedures of analysis and initial understanding of the system.

Key actions to ensure good quality inclusiveness and procedures include:

- Allow stakeholders to assist in the identification of other stakeholders
- Ensure that stakeholders trust the conveyor
- Enable dialogue, not a one-way information feed
- Ensure parties are sufficiently prepared and briefed to have well-informed opinions and decisions
- Involve stakeholders in defining the terms of engagement
- Allow stakeholders to voice their views without restriction and fear of penalty
- Include a public disclosure and feedback process

Step 2. Identify key stakeholders

Using a combination of approaches will reduce the risks associated with any one particular approach. Identification by staff of key agencies, and other knowledgeable individuals. Those who have worked in the system for some time can identify groups and individuals whom they know to have interests in the key issues and to be well-informed about them. Identification through written records and population data. Census and population data may provide useful information about numbers and locations of people by age, gender, religion etc.

Stakeholder self-selection. Announcements in meetings, in newspapers, local radio or other local means of spreading information, can elicit stakeholders coming forward. Identification and verification by other stakeholders. Early discussions with those stakeholders who are identified first can reveal their views on the other key stakeholders who matter to them.

Step 3. Investigate stakeholders' interests, characteristics and circumstances

Useful methodologies for this step of the analysis include:

- Semi-structured interviews in which an informal checklist of issues is used to guide an interview with a stakeholder group, whilst allowing other issues to arise and be pursued. This approach is particularly useful for cross-checking, identification of common ground, identification of tradeoffs and identification of decision-making frameworks of stakeholders.
- Digging up existing data – a variety of recorded materials may shed light on stakeholders' interests, characteristics and circumstances.
- Time lines can be prepared with stakeholders of the history of links and impacts of particular policies, institutions and processes, with discussion of cause and effect of various changes.
- Diagrams help many people to get a quick idea of what is planned or talked about. They can work well to stimulate discussion by both non-literate and literate people.

In general diagrams and visualizations work because they provide a focus for attention while discussing an issue, represent complex issues simply, stimulate ideas and therefore assist in decision-making.

Step 4 Identify patterns and contexts of interaction between stakeholders

Two methodologies are particularly useful at this stage:

- The four Rs. This is a tool for unpacking stakeholder roles. This is used to assess stakeholders' Rights, Responsibilities, Rewards (or revenues or returns) and Relationships with other groups.
- Narrative interviews. This is an approach to getting the best out of key informants, allowing stakeholders to put forward information in their own way. It can be structured to be able to glean their insights into the key issues pertaining to the policy or institution – or it can be looser, based on 'telling the story', which allows these issues to be brought out without necessarily having to ask overt questions about them.

Step 5: Assess stakeholder power and potential

1. Stakeholders of high importance and high influence: should be closely involved throughout project to ensure an effective coalition

2. Stakeholders of high importance and low influence: require special effort that their needs are met and their participation is meaningful

3. Stakeholders of low importance and high influence: not a target but may oppose; need to be kept informed and views acknowledged to avoid conflict. Need careful monitoring and management

4. Stakeholders of low importance and low influence: require no special participation strategies beyond general public information

Table1. classification of stakeholders

Matrix classification of stakeholders according to relative influence on, and importance to the project	
A. High importance / high influence	B. High importance / low influence
C. Low importance / high influence	D. Low importance / low influence

Step 6 Assess options and use the findings to make progress

Self-Check –1	Written test

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Part I. Give short answer (10pts)

1. What is stakeholder (2pts)
2. List the stages of stakeholder analysis (2pts)
3. How do you identify key stakeholder? (2pts)
4. List and discuss the classification of stakeholder based on their potential (4pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating – 5 points** **Unsatisfactory - below 5 points**

Information Sheet 2- Availability of Specialists in Management Planning

The management planning process will run much more smoothly if an effort has been made to train and educate staff (especially designated area managers) on the planning process and to provide them with the skills required to participate in this task. Therefore, building such capacity is a priority for management. Management Plans can be prepared, either by using external consultants, or with internal expertise. There are some advantages to using external consultants to prepare plans (they can provide objectivity, professional expertise and a fresh insight, as well as a 'professionally presented' document). However, once the plan is prepared, the expertise and knowledge gained by the consultants leaves with them. Plans prepared in-house may take longer and look less 'polished', but the use of in-house staff can result in a greater sense of ownership as well as contributing to staff development.

Many larger organizations responsible for managing designated areas contain planning units or individual specialists to coordinate the planning process, and to provide support and training for staff involved in the process. Whether or not staff resources are dedicated primarily to planning, it is advisable that planning systems are designed and adopted by the managing organization. These should identify exactly how plans will be prepared, monitored, implemented and amended, and who will be involved. An explicit budget commitment should be made for the preparation and implementation of plans There is often a temptation to divert staff engaged in planning to more immediate tasks and high priority deadlines. To ensure that the planning output is timely and of high quality, planning staff should be quarantined from involvement in day-to-day man - agreement issues as far as possible. On the other hand, they should be aware of such issues to ensure the plan is realistic and well-focused.

Self-Check –2	Written test

Name…… ID……. Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer. (8 point)

1. What is the role of specialist in planning process (4pts)
2. What is the main metrological information obtained from metrological agency? (2pts)
3. Who is the specialist in resource management plan? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4 points**

Information Sheet 3- Timelines for Development of the Participatory Management Plan

Management plan is a plan that includes financial resources, human resources management plan and production management plan

A management plan should

- explain how the site will be managed and why.
- describe responsibilities
- evaluate the current situation
- set outcomes and evaluation systems
- identify resources.

A good management plan will be of a size that can be easily updated and referred to as a working document. Management plans can also be used to support grant applications.

Management plans should be visionary and imaginative, and should make links to areas such as health, access for everyone, and social objectives on which your LNR could deliver. Making these links highlights the importance of the reserve and will assist you in applying for funding and winning resources.

Management planning is a process, the output of which will be a 'fit-for-purpose' management plan. Plans should always be as concise as possible, although naturally a large, complex site will have a lengthier plan than a small site.

It is important that the process is inclusive, with stakeholders being given the chance to input into the plan. In many ways, the process can be as important as the plan itself, and can be a good way of engaging the community.

The purpose of the management plan is to set out what management will be undertaken and how this will be achieved. A well-written plan will set the site in context with regard to green networks and access strategies, and will operate in much the same way as a business plan in terms of attracting funding.

A Management Plan should be:

- Clear and accessible: easy to read, jargon free and well presented.
- Concise and comprehensive: no longer than is absolutely necessary, but with enough information to fulfil its functions.
- Accurate and objective: without major errors or statements likely to date and with the criteria for all judgements clearly explained.
- Systematic and logical: With management policies derived from an assessment of the site and with a clear rationale given for all proposals.
- Acceptable and motivating to all those with interests in and emotional attachment to the site.
- Precise and practical: with clear objectives, realistic methods for achieving them, resulting in desired outcomes which can be monitored.
- Focused and effective: fulfilling its purpose as a tool for site management, meeting the needs of its users and satisfying any legal or other obligations.

3.1. The context within which the plan must operate Regional integration

Management Plans must be prepared and implemented within the context of the lands, issues and peoples surrounding protected areas. Protected area managers need to look beyond their immediate boundaries in planning their areas, e.g. when planning buffer zones and compatible uses, and designing educational, interpretive and public involvement programs. Regional integration becomes particularly important when others are responsible for administering the area beyond the protected area boundary. This is a common feature in countries where the national government has responsibility for national parks, and provincial, regional or local administrations have responsibility for the area outside the parks. The long-term success of protected areas must be seen in the light of the search for more sustainable patterns of development in general. Therefore, Management Plans should be integrated with or at least link to local development processes and the activities of other agencies and organizations working in the area. The aspirations and needs of the local communities around the protected area (as well as those living in it) must also be identified and addressed through the planning process and in the final plan.

A. Link to National Systems Plans, other planning and legislation

Management Plans should desirably be prepared within the context of a national systems plan for protected areas (see Davey, 1998). This will help ensure co-ordination with other national planning systems/agencies and with other protected areas. It will also provide strategic guidance for individual Management Plans. If no system plan has been developed, Management Plans should be linked to other relevant plans (e.g. local government plans, development plans) and legislation. Protected area planning will often need to be consistent with parallel environmental protection policy, and policies related to heritage protection. Where significant new developments are planned or changes are proposed which may have broader wildlife or environmental impact, it may be necessary before implementation to meet the requirements of other legislation. Examples are the National Environmental Policy Act in the USA, the Environmental Protection and Biodiversity Conservation Act in Australia, and the European Birds and Habitats Directives.

B. A clear framework of approved policy

It is important that management planning be carried out within a framework of approved policies within the protected area agency. This framework should be sufficiently specific both to guide and set limits on different aspects of protected area management. Without a clear policy framework to guide the development and implementation of Management Plans, managers for different protected areas may struggle to define their own policies for the same issues – not only duplicating effort, but perhaps also leading to potentially conflicting or inconsistent interpretations and directions. Finally, it should be said that planning is a lot like other “good” things: it’s not worth much in the absence of sound governance and/or competent administration.

Self-Check –3	Written test

Name…… ID……. Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: short answer. (10 point)

1. What a management plan should consists (5pts)
2. What is the role of environmental policy in plan development for designated areas? (4pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4 points**

Information Sheet 4- Identification of Resources for Development of Management Strategies

Before embarking on a Management Plan, there needs to be a clear idea of the costs and resources available. This is particularly the case where there are to be resource and user surveys, public consultation and possibly the engagement of consultants. A realistic appraisal needs to be made to ensure all costs associated with the plan can be fully met, bearing in mind that the planning may take some years to complete.

Where resources are not available, the manager must decide whether the process should be deferred until a later time.

Importantly there also needs to be recognition of costs to implement the plan so that a measure of consistency exists between what is being planned and what can realistically be expected to be implemented.

A clear process for integrating park planning with budgets and budgeting must be in place. Without this, the objectives for management cannot be reconciled with the 'costs' of achieving them. The plan then loses credibility as an effective instrument to guide the management of the protected area. Instead it becomes a 'wish list' of actions to be carried out if and when funds are available. If costs are ignored, the value of the planning effort and its results are diminished. A detailed financial analysis of the impacts of the plan and of the resources required for its implementation should be prepared and included in an associated Business Plan. For government agencies, this would be prepared as a separate document. Recurring expenditure required to run the protected area should be linked to the annual budgeting process for the organization, and additional capital required to carry out specific projects should be highlighted and sources of funding identified (for further advice on business planning for protected areas, see IUCN, 2000a).

4.1. Resources allocation

- Topographical, vegetation, and aerial maps,
- Government,
- Literature and internet resources,
- Local written and oral histories of migrant and catchment area information and catchment management associations,
- Local experts such as flora and fauna preservation,
- Cultivation and identification community groups

The allocation of resources, especially money, is one of the most difficult choices that an agency will face. It involves a continuing process of estimating financial and other resource needs, obtaining the money and materials, then adjusting the budget based on the resources received.

There are some general concepts that are helpful in stretching funds:

1. Linking to other programs: This is the simplest and most effective way to expand the capabilities of an organization. The methods usually considered are cost-sharing, pooling of resources, or contributing matching funds.

2. Recoverable funding: In recoverable funding, all or a portion of the funds distributed are returned to the program (usually for reinvestment). The most common examples are revolving loans and sales or subsidy schemes. Recoverable funding increases the number of people who can be served and extends the "service" of the cash originally allocated.

3. Maximization of buying power: This refers to the practice of selectively spending money so that the financial power of either the programs or the beneficiaries is extended. For example, if loans are determined to be a viable option, an agency can use its money to guarantee loans from usual financial institutions to clients who normally would not be eligible, instead of using its own resources to make the loans. In this manner an amount of $100,000 could be used to guarantee up to $1,000,000 or more in loans, thus increasing tenfold the buying power of the money the agency has on hand. At the individual level, an example of maximizing expenditure is the use of coupons or redeemable certificates (such as food stamps) to increase the buying power of the

people. In this way, the resources of the agency can be "piggy-backed" with the resources of the victims.

4. Multiple objective planning: In this approach, expenditures are targeted so that more than one objective is realized with each disbursement. This can be accomplished by injecting money into the community in such a way that most of it will stay in the community or at least pass through several hands before leaving. An example: a work project is established to repair a road damaged by the disaster. People are paid in cash and by coupons redeemable in local markets only; the workers spend the money and thereby help stimulate recovery of the local economy, which in turn provides a market for goods from the farmers affected by the disaster. In this manner, the following objectives are reached: a road is repaired, capital is provided to the victims, the victims' building power is extended, the market is stimulated, an economic unit (the market) is assisted, and finally, the farmers (victims themselves) are assisted.

Self-Check –4	Written test

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: short answer. (10 point)

1. List resource required to prepare management plan (4pts)?
2. What is the importance of resource identification (4pts)
3. List and discuss way to get funds? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 5points** **Unsatisfactory - below 5 points**

LG #25	**LO3. Prepare Site Description**

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Identification of Landscape value and mapping
- Identification of Physical condition and mapping
- Assessing Land use and historical modifications
- Biological characteristics of the site

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, **upon completion of this learning guide, you will be able to**:

- Identify and map landscape values of the area
- Identify and map physical condition and physical features and characteristics of the area.
- Determine and record land uses, including current cultural and historical modifications
- Document biological characteristics of the site according to legal and organizational guidelines.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets

7. Perform “the Learning activity performance test” which is placed following “Operation sheets”
8. If your performance is satisfactory proceed to the next learning guide,
9. If your performance is unsatisfactory, see your trainer for further instructions or go back to “Operation sheets”.

Information Sheet 1- Identification of Landscape value

Introduction

Landscape reflects the relationship between people and place, and the part it plays in forming the setting to our everyday lives. It is a product of the interaction of the natural and cultural components of our environment, and how they are understood and experienced by people. It is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors

Landscape Value- The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, because of its quality, special qualities including perceptual aspects such as scenic beauty, tranquility or wildness, cultural associations or other conservation issues.

It also includes Visual amenity, biodiversity, recreation and tourism, conservation, water and air quality, and cultural values.

Our landscapes vary because of, amongst other variables, their underlying geology, soils, topography, land cover, hydrology, historic and cultural development, and climatic considerations. The combination of characteristics arising from these physical and socio-economic influences, and their often-complex interrelationships, makes one landscape different from another.

Landscape character- may be defined as a distinct and recognizable pattern of elements or characteristics in the landscape that make one landscape different from another, rather than better or worse.

Landscape Character Assessment (LCA)- is the process of identifying and describing variation in the character of the landscape. It seeks to identify and explain the unique combination of elements and features (characteristics) that make landscapes distinctive.

1.1. Landscape value and mapping

1. **Site Description and assessment-** This is an accurate description of the Area and, where appropriate, its surroundings to ensure that individuals planning a visit and national authorities responsible for issuing permits are sufficiently appraised of the special features of the area. It is important to describe adequately those features of

the Area that are being protected, thus alerting users of the Management Plan to features of particular sensitivity.

Your management plan should include a description of the characteristics of the site. LNRs are for people as well as wildlife, so the site description should refer to both of these. Examples of what to include in the site description are –

- Land tenure
- Biological and geological data
- Current usage
- Interpretational, educational and other facilities
- Surrounding communities and relationship to other greenspaces – set the site in context

2. Site identification.

A. Site type

This character code takes into account the possible relations between proposed eligible Sites of Community Importance (SCI) and classified Special Protection Sites (SPA). Each of these codes corresponds to a particular relation. Where a relationship exists with more than one other site use the code which defines the predominant relationship. The code also automatically allows identification of the site type (whether it is SPA, eligible as SCI or both).

B. Site code

"In a relational database, each site is recognized by a unique code which forms the key-item within the database.

C. Site name

Sites names are entered in their local language. In this way, difficult translation is avoided and integration of existing data on the national or local level is straightforward.

3. Site location.

I. Site-center location

II. Site Surface Area and length

4. Ecological information

1. Habitat type. present on the site and site assessment for them

i) Site assessment criteria for a given natural habitat type.

Five Key Principles for Landscape Assessment

The following Principles should be adhered to whatever the scope and methodology adapted in a Landscape Character Assessment:

1. Landscape is everywhere and all landscape and seascape has character
2. Landscape occurs at all scales and the process of Landscape Character Assessment can be undertaken at any scale
3. The process of Landscape Character Assessment should involve an understanding of how the landscape is perceived and experienced by people
4. A Landscape Character Assessment can provide a landscape evidence base to inform a range of decisions and applications;
5. A Landscape Character Assessment can provide an integrating spatial framework – a multitude of variables come together to give us our distinctive landscapes.

Self-Check –1	Written test

Name…… ID……. Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I. short answer (10pts)

1. What is land scape? (2pts)
2. What is the importance of land scape assessment? (2pts)
3. write down the key principles of land scape assessment (3pts)
4. What is the d/c b/n land scape assessment & land scape character? (3pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Information Sheet 2- Identification of Physical condition and Mapping

Introduction

The physical condition has been defined as the geographic area and factors around us that influence what foods are available to people and how food is obtained.

The physical environment of plants and animals has five main components which determine the survival of the species:

(i) the environment is a source of radiant energy which is trapped by the process of photosynthesis in green cells and stored in the form of carbohydrates, proteins, and fats. These materials are the primary source of metabolic energy for all forms of life on land and in the oceans;

(ii) the environment is a source of the water, carbon, nitrogen, other minerals, and trace elements needed to form the components of living cells;

(iii) factors such as temperature and daylength determine the rates at which plants grow and develop, the demand of animals for food, and the onset of reproductive cycles in both plants and animals;

(iv) the environment provides stimuli, notably in the form of light or gravity, which are perceived by plants and animals and provide frames of reference both in time and in space. These stimuli are essential for resetting biological clocks, providing a sense of balance, etc.;

(iv) the environment determines the distribution and viability of pathogens and parasites which attack living organisms, and the susceptibility of organisms to attack

Physical attributes of the site: denotes the totality of abiotic factors that can affect the survival, development and growth of a given tree species.

The three major physical/abiotic environmental factors are climate, soil and topography.

Site assessment in forestry involves the characterization of a given site in terms of these important environmental factors.

2.1 physical condition

1. **Precipitation.**

All plant growth depends on the availability of water, which in forest ecosystems is provided primarily by precipitation, but can also be provided by access to groundwater or, in riparian forest communities, to stream water. Forest canopies intercept some precipitation, and thus only 50-80% of rainfall reaches the forest floor, of which some of that evaporates before entering the soil. Of the precipitation that reaches the soil, approximately 50-80% will be transpired back into the atmosphere by the vegetation. Thus, forests serve as large water pumps between the soil and the atmosphere.

2. Soil.

Trees are rooted in soil, which provides nutrients and water that support tree growth. The availability of nutrients and water are dependent on soil texture (sand, silt, loam, clay content), pH, cation exchange capacity, and water holding capacity, that are determined not only by soil texture but also by organic matter content, and porosity. These properties are largely a function of the geology of a specific site, which is determined by the bedrock quality, weathered bedrock material, and organic matter incorporated into the weathered bedrock material. Depending on the soil properties, more or less nutrients or water become available to the trees. Nutrients are cycled between the biosphere and the pedosphere (soil) through tree uptake, litterfall, and decomposition. Some nutrients are re-absorbed, for example nitrogen, before the leaves are dropped. However, most nutrients are recycled into the soil via decomposition through microbes and fungi. More importantly, trees are the primary pathway by which water moves between the soil and the atmosphere. However, trees can also redistribute water within the soil. When trees have access to groundwater and the topsoil is dry, then hydraulic lift can occur. Hydraulic lift is the biologically mediated process of water redistribution through primarily plant roots (Caldwell et al. 1998, Dawson 1993), but can also be facilitated through, for example, mycorrhizal mycelia from lower moist soil layers to upper dryer soil layers. Recently, it has been also shown that roots transport water laterally in the soil to dryer soil regions (Nadezhdina et al. 2010).

3. Light.

Forests alter microclimatological conditions due to their height, leaf area, and density, through the absorption of radiation and cooling through transpiration. For example, in a deciduous forest canopy, light reaches the floor in the winter time, but less so in the

summer time when leaves are blocking the passage of light to the ground. This has consequences for photosynthesis, transpiration, and understory processes. Photosynthesis requires light and carbon dioxide (CO2) which enters through stomata in the leaves and needles of forest tree species. Stomata are pores that can open and close to regulate the uptake of CO2 and the loss of water (transpiration). This is a basic trade-off that all plants need to make, and highlights the critical role of stomata in controlling transpiration and photosynthesis. As light penetrates the canopy, it is attenuated (i.e., decreased). Thus leaves lower in the canopy receive less light and have to develop in such a way to maintain a positive carbon balance via photosynthesis. This is accomplished by orienting the leaves horizontally, and making them larger and thinner, which allows them to capture more light per amount of leaf material-in essence displaying shade leaf properties. Concomitant with reduced light, carboxylation efficiency, or the efficiency of carbon uptake in leaves, is also reduced (Schäfer et al. 2010). Leaf shape and placement, though, can play an important role. In coniferous canopies, due to the shoot structure and narrow leaf shape, more light penetrates, thus enhancing photosynthesis lower in the canopy and in the understory species. The effect of light bouncing in-between needles on a shoot, is referred to as the penumbral effect (Anderson & Miller 1974).

2.1.1 M**apping physical feature**

Maps are very effective tools for presenting information such as land tenure details, habitat information and site context. Using maps will cut down the length of your document and will make the plan easier for a wide range of people to understand.

You should follow the description with an assessment of the site. This is where you explain why the site is important, and why management is needed to ensure it continues to be so.

Maps are a critical component of any Management Plan and should be clear and sufficiently detailed. If the area is particularly large a number of maps that vary in scale may be appropriate, but the minimum is likely to be two: one showing the general region in which the Area is situated, as well as the position of all nearby protected areas; and a second map illustrating the details of the Area itself. It is essential that the maps clearly indicate the boundary of the Protected Area

Using local knowledge, you can produce physical map of the area, highlighting certain features.

Procedures:

1. Decide what type of map: Social (Residential area) Natural Resource (land, water)
2. Find people who know and are willing to share their knowledge
3. Find a suitable place and for mapping
4. Ask people to identify the key features and land mark first (E.g. Rivers, schools, roads etc.)
5. Help people to get started
6. Encourage corrections and additions.
7. Revise and add details to the map during fieldwork.
8. Keep a permanent paper record of the map.
9. Develop map

Features to be considered for inclusion on maps

1. Essential features

1.1. Title

1.2 Latitude and longitude

1.3 Scale bar with numerical scale

1.4 Comprehensive legend

l.5 Adequate and approved place names

1.6. Map projection and spheroid modification

1.7. North arrow

1.8. Contour interval

1.9. If image data are included, date of image collection

2. Essential topographical features

2.1 Coastline, rock and ice

2.2 Peaks and ridge lines

2.3 Ice margins and other glacial features

2.4 Contours (labelled as necessary) survey points and spot heights

3. Natural Features

3.1 Lakes, ponds, streams

3.2 Moraines, screes, cliffs, beaches

3 .3 Beach areas

3.4 Vegetation

3.5 Bird and seal colonies

4. Anthropogenic Features

4.1 Station

4.2 Field huts, refuges

4.3 Campsites

4.4 Roads and vehicle tracks, footpaths features overlap

4.5 Landing areas for fixed wing aero planes and helicopters

4.6 Wharf, jetties

4.7 Power supplies, cables

4.8 Aerials. antennae

4.9 Fuel storage areas

4.10 Water reservoirs and pipes

4.11 Emergency caches

4.12 Markers, signs

4.13 Historic sites or artefacts, archaeological sites

4.14 Scientific installations or sampling areas

4.15 Site contamination or modification

5. Boundaries

5.1 Boundary of Area

5.2 Boundaries of subsidiary zones areas. Boundaries of contained protected area

5.3 Boundary signs and markers (including cairns)

5.4 Boat/aircraft approach routes

5.5 Navigation markers or beacons

5.6 Survey points and markers

Self-Check – 2	Written test

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Part I. short answer (14pts)

1. Write down some physical feature of the site (4pts)
2. What is the importance of mapping (4pts)
3. Write procedure to mapping (6pts)

You can ask you teacher for the copy of the correct

Note: **Satisfactory rating - 7points** **Unsatisfactory - below 7 points**

Operation Sheet 2	Identification of physical feature and mapping

Objective To identify and map physical feature

Materials needed:

1. GPS
2. Compass
3. note book
4. pen and pencil
5. Specific site
6. Over all tent

Procedures:

1. Undertake site assessment
2. collect resource required
3. Identify site character
4. Identify and record landscape value
5. Develop map
6. Prepare a report

Information Sheet 3- Assessing Land use

Introduction

There is bound to be conflict over land use. The demands for arable land, grazing, forestry, wildlife, tourism and urban development are greater than the land resources available. In the developing countries, these demands become more pressing every year. The population dependent on the land for food, fuel and employment will double within the next 25 to 50 years. Even where land is still plentiful, many people may have inadequate access to land or to the benefits from its use. In the face of scarcity, the degradation of farmland, forest or water resources may be clear for all to see but individual land users lack the incentive or resources to stop it.

3.1. Land-use planning

Land use planning is the systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land-use options. Its purpose is to select and put into practice those land uses that will best meet the needs of the people while safeguarding resources for the future. The driving force in planning is the need for change, the need for improved management or the need for a quite different pattern of land use dictated by changing circumstances.

All kinds of rural land use are involved: agriculture, pastoralism, forestry, wildlife conservation and tourism. Planning also provides guidance in cases of conflict between rural land use and urban or industrial expansion, by indicating which areas of land are most valuable under rural use.

Two conditions must be met if planning is to be useful:

1. the need for changes in land use, or action to prevent some unwanted change, must be accepted by the people involved;
2. there must be the political will and ability to put the plan into effect. Where these conditions are not met, and yet problems are pressing, it may be appropriate to

mount an awareness campaign or set up demonstration areas with the aim of creating the conditions necessary for effective planning.

Land-use planning aims to make the best use of limited resources by:

- assessing present and future needs and systematically evaluating the land's ability to supply them
- identifying and resolving conflicts between competing uses, between the needs of individuals and those of the community, and between the needs of the present generation and those of future generations
- seeking sustainable options and choosing those that best meet identified needs
- planning to bring about desired changes
- earning from experience.

There can be no blueprint for change. The whole process of planning is iterative and continuous. At every stage, as better information is obtained, a plan may have to be changed to take account of it.

Self-Check – 3	Written test

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Part I. short answer (14pts)

4. What is land use (4pts)?
5. What is the importance of assessing land use (4pts)
6. Write procedure to mapping (6pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 7points** **Unsatisfactory - below 7 points**

Operation Sheet 3	Assessing land use

Objective To assess land use

Materials needed:

1. GPS
2. Compass
3. note book
4. pen and pencil
5. Aerial photo
6. Over all tent

Procedures:

1. Undertake smallholder farm land observation
2. collect resource required
3. observe farming activities
4. Identify and record and land use planning of the area
5. Develop rough sketch
6. Prepare a report

Information Sheet – 4. Biological characteristics of the site

Introduction

Naturally occurring Bioindicators are used to assess the health of the environment and are also an important tool for detecting changes in the environment, either positive or negative, and their subsequent effects on human society. There are a certain factor which govern the presence of Bioindicators in environment such as transmission of light, water, temperature, and suspended solids. Through the application of Bioindicators we can predict the natural state of a certain region or the level/degree of contamination (Khatri & Tyagi 2015)

Biological attributes of the site: denotes the totality of biotic factors that can affect the survival, development and growth of a given tree species.

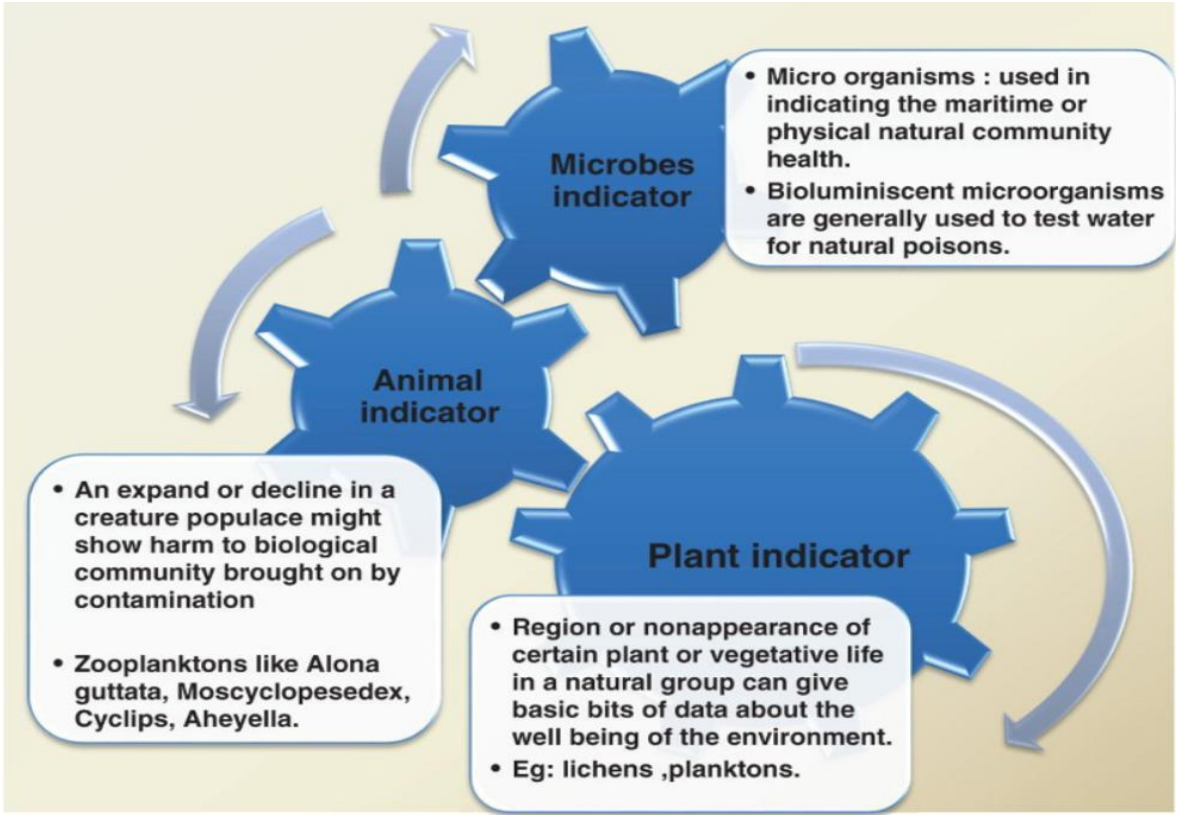
4.1. Biological characteristics

- Native and introduced plants and animals
- Habitats
- vegetation structure and
- rare and endangered species.

The advantages associated with using Bioindicators are as follows:

1. Biological impacts can be determined.
2. To monitor synergetic and antagonistic impacts of various pollutants on a creature.
3. Early stage diagnosis as well as harmful effects of toxins to plants, as well as human beings, can be monitored.
4. Can be easily counted, due to their prevalence.
5. Economically viable alternative when compared with other specialized measuring systems.

Fig.1 biological cycle



Self-Check – 4	Written test

Name…… ID…… Date…….

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Part I. short answer (14pts)

1. List at least three biological characteristics of the site (4pts)?
2. What is the r/p b/n biological and physical factors (4pts)?
3. Write the advantage associated with biological condition (6pts)

Note: **Satisfactory rating - 7points** **Unsatisfactory - below 7 points**

LAP Test	Practical Demonstration

Name. _____ID _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 8 hours.

Task 1. Identify and map physical feature

Task 1. Assess land use

LG # 26	**LO4: Analyze Site Information and Description**

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Evaluating information principles and objectives.
- Documenting site plans, technical reports and maps.
- Determining priorities and key conservation issues
- Preparing longitudinal projections of continuing impacts
- Land capability assessment
- Identifying and documenting opportunities and constraints
- Under taking Presentation to stakeholders/clients

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Evaluate information in terms of core principles and objectives.
- Produce documents of the site including plans, technical reports and maps.
- Determine priorities and key conservation issues in line with the designated area requirements.
- Prepare longitudinal projections of continuing impacts
- Assess Land capability jointly with specialists and community group.
- Identify and document opportunities and constraints to meeting planning objectives and goals are.
- Undertake Presentation to stakeholders/clients

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets
7. Perform “the Learning activity performance test” which is placed following “Operation sheets”
8. If your performance is satisfactory proceed to the next learning guide,
9. If your performance is unsatisfactory, see your trainer for further instructions or go back to “Operation sheets”.

Information Sheet 1- Evaluating information principles and objectives

Introduction

Effective planning requires information. The quality of a decision depends greatly on an accurate understanding of the circumstances surrounding an issue and on knowledge of the available alternatives. The better the information, the better the resulting decision. The development of an information system helps to manage both existing and incoming information. Information management can be likened to the four-stroke cycle of a conventional internal combustion engine: Information in (acquisition) (Intake), Assessment or evaluation (Compression), Decision making (Ignition), and Information out (decision implementation Exhaust). The task of generating data for managerial decision making should be viewed as the function of an information management system. This is a scheme according to which information is provided, in the right amount, to the right persons, at the right time. Determining what information to include and how to package this information depends on the person to whom the information is to be addressed and the reason for which it is given. Thus, an information system carefully distinguishes, for example, between reports from the project manager to top management, and daily progress reports the manager receives from the project staff. It supports the planning, control, and operations functions of an organization by providing information for use in decision making.

1.1 information principles and objectives

Objectives follow from the management vision. They are more specific statements of intentions, setting out the conditions that management aims to achieve. They are thus statements of 'outcomes' rather than how to achieve them. To the extent possible, these objectives should be listed in priority order to guide subsequent decisions. Objectives can be contentious, creating difficulties within the agency charged with the management of the protected area, the community or the users and evaluated.

The purpose of this step is to identify and understand why the protected area is important. It helps to describe the 'values' associated with the protected area, explains why it was designated and identifies its benefits to society. As more emphasis is placed

on including local people and other 'stakeholders' in the planning process, it is important to have a mechanism through which the values they hold for the area can be identified and described. Unless protected area values are understood, there is a risk that management actions, either deliberately or inadvertently, will affect not only the natural resources but also the social and economic situation, especially that of local people. Frequently the initial reasons for creating a protected area are subjective or poorly understood and badly communicated. Unless the Management Plan can document the inherent natural and cultural values, incompatible usage may continue, making it difficult to ensure its conservation into the future. Unless the preparation of Management Plans addresses the concerns of local people then their support will be impossible to secure.

The evaluation of values is a two-part process:

1. The identification of the key features or exceptional values. These are the features or values that must be protected and preserved to maintain the significance of the protected area. They may not be limited to those within the protected area boundary.
2. The development of a succinct statement of significance which explains the protected area's importance to society or particular interest groups. The statement of significance expands upon the identification of values by adding unique qualifiers and placing protected areas within their context at a regional, national and international level. Along with the protected area's broad purposes, this statement provides an important framework upon which the Management Plan should be based. The significance of the protected area, including a view of its potential values, is basic to all the other assumptions about the site and decisions about the way it should be managed and used. Sometimes the founding legislation or legal agreement designating the protected area will mention its importance; more often, it will only be vaguely mentioned, if at all. An essential part of carrying out an evaluation of any protected area is to define the criteria by which to identify and measure its natural, cultural and socio-economic values, now and in the future. However, many Management Plans fail properly to identify the existing and potential cultural, social and economic values of a protected area and tend to limit their analysis to the narrower aspects of ecological evaluation. It is unwise to overlook wider values, since this will affect the attitude of local peoples towards the

protected area and can seriously undermine the planning process and the effectiveness of subsequent management

Preparing guidelines on criteria for exceptional value in assessing the significance of a protected area, the planner should ask if the area contains:

- Outstanding examples of natural, scenic, geological, scientific, ecological, floral, faunal and recreational values (and if so, why)
- Unique biological attributes, vegetation types and landforms (and if so, why)
- Areas essential for protecting the ecological integrity of the protected area as a whole, (including areas critical for maintaining water flow and quality and the reasons why)
- Areas and resources that are vital (economically, culturally or in other ways) to local communities
- Areas and resources which provide essential services to people outside the park, especially where these have significant economic or political values
- Rare and endemic plants and animals
- Sensitive, threatened or endangered plants and animals and habitats
- Resources which are unusually sensitive to human use
- Outstanding examples of modified landscapes and evidence of sustainable use of natural resources
- Major archaeological or historical sites
- Major cultural sites
- Features with world-wide recognition (e.g. as World Heritage)

Classes of Information

The types as well as sources of information will vary, but generally there are three classes of information:

Planning Information: This type of information relates to the tasks of formulating objectives, determining the amounts and kinds of resources necessary to attain the objectives, and the policies that govern their use. Much of this information will come from external sources and will relate to such factors as the present and predicted situation in the operational area, availability of resources (material, financial and

human), and the political environment. This information forms the input to the non-programmed types of decisions made at each level in the organization.

Control Information: This information aids managers to make decisions which are consistent with the achievement of organizational objectives and to see how efficiently resources are being used. It enables managers to determine if "actual results" are meeting "planned-for results" (objectives). It relies heavily on internal sources of information and involves such problems as developing budgets and measuring the performance of personnel. The nature of problems faced at this level may result in either programmed or non-programmed types of decisions.

Operational Information: This information relates to the day-to-day activities of the organization. Operational data is usually required in regard to three broad categories: people, property, and the operation (or status) of emergency services. It includes routine and necessary types of information such as financial accounting, inventory control, and scheduling. Most of the information is generated internally, and since it usually relates to specific tasks, it often comes from designated subordinates. Field-level managers are the primary users of this information

Self-check 1	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (12 point)

1. Why do you evaluate information? (2pts)
2. List the three classes of information (4pts)

10. Write down the evaluation process (6pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 2- Documenting site plans, technical reports

Introduction

If available, for each site reference is made to relevant publications and/or scientific data concerning the site. Information entering should be made according to standard convention for scientific references. Unpublished or communications, referring to the information given in the recording form, should be included wherever useful

A technical report is a formal report designed to convey technical information in a clear and easily accessible format. It is divided into sections which allow different readers to access different levels of information. This guide explains the commonly accepted format for a technical report; explains the purposes of the individual sections; and gives hints on how to go about drafting and refining a report in order to produce an accurate, professional document.

Structure of technical reports

A technical report should contain the following sections

Section	Details
Title page	Must include the title of the report. Reports for assessment, where the word length has been specified, will often also require the summary word count and the main text word count
Summary	A summary of the whole report including important features, results and conclusions
Contents	Numbers and lists all section and subsection headings with page numbers
Introduction	States the objectives of the report and comments on the way the topic of the report is to be treated. Leads straight into the report itself. Must not be a copy of the introduction in a lab handout.

The sections which make up the body of the report	Divided into numbered and headed sections. These sections separate the different main ideas in a logical order
Conclusions	A short, logical summing up of the theme(s) developed in the main text
References	Details of published sources of material referred to or quoted in the text (including any lecture notes and URL addresses of any websites used.
Bibliography	Other published sources of material, including websites, not referred to in the text but useful for background or further reading.
Acknowledgements	List of people who helped you research or prepare the report, including your proofreaders
Appendices (if appropriate)	Any further material which is essential for full understanding of your report (e.g. large scale diagrams, computer code, raw data, specifications) but not required by a casual reader

Self-check 2	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (12 point)

1. Why do you evaluate information? (2pts)
2. List the three classes of information (4pts)
3. Write down the evaluation process (6pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 3- Determining priorities and key conservation issues

Introduction

There are some large-scale conservation issues that affect or potentially affect many species and habitats over large landscapes and throughout the state. They also affect people by reducing land productivity, reducing opportunities for recreation, altering water supplies, or increasing risk of severe wildfires. As a result, problems affecting large areas must be considered across jurisdictional and ownership boundaries. Community planning and preparedness efforts for climate change, wildfire, flooding, and drought bring together interest groups, communities and municipalities to learn about resources that can help alleviate problems.

Oregon Department of Fish and Wildlife (ODFW) worked with stakeholder Advisory Committee as the Strategy was developed in 2005 to identify Key Conservation Issues of greatest potential impact to Strategy Habitats and Strategy Species statewide.

They include:

- Land Use Changes
- Invasive Species
- Disruption of Disturbance Regimes (Fire and floods)
- Barriers to Animal Movement
- Water Quality and Quantity
- Institutional barriers to voluntary conservation, now re-titled in 2015 as Challenges and opportunities for private landowners

Some examples of conservation issues may include priorities for protection, conservation and restoration works for key native flora and fauna species, disease and pest flora and fauna control, nutritional issues, and erosion, salinity and toxicity repair work and habitat rehabilitation and restoration of balance.

Conservation status depends on the following criteria

I) Degree of conservation of the structure

- excellent
- good

- Bad conservation

II.) Degree of conservation of the functions

II) Restoration possibility

The ranking system should be the using 'best expert judgement:

- restoration easy
- restoration possible with an average effort
- restoration difficult or impossible

3.1. Conservation Strategy:

Promote healthy environment and wildlife populations by maintaining and restoring functioning habitats, preventing declines of at-risk species, and reversing any declines in these resources where possible. Reducing and reversing the impacts of the key conservation issues can contribute significantly to these goals, while also contributing to healthy human communities.

Overall Recommended Actions for all statewide Key Conservation Issues:

a. Work with community leaders in both urban and rural areas, and work with agency partners to ensure planned, efficient growth and development, and to preserve nature and wildlife habitats; farm, forest and rangeland; open spaces; and recreation areas.

b. Help landowners and agency partners find reliable and useful information about nature conservation, wildlife and habitats early in the project planning process.

c. Fund, use, expand, and improve financial incentive programs and other voluntary conservation tools to support conservation actions taken by landowners and land managers.

d. Develop new voluntary conservation tools to fulfill identified needs.

Climate change is one of the most serious Key Conservation Issue

1 Increase in average annual air temperatures, and likelihood of extreme heat events (HEAT)

2 Changes in hydrology and water supply; reduced snowpack and water availability in some basins; changes in water quality and timing of water availability (HYDRO)

3 Increase in wildfire frequency and intensity (FIRE)

4 Increase in ocean temperatures, with potential for changes in

ocean chemistry and increased ocean acidification (OCEAN)

5 Increased incidence of drought (DROUGHT)

6 Increased coastal erosion and risk of inundation from increasing sea levels and increasing wave heights and storm surges (SLR)

7 Changes in the abundance and geographical distributions of plant species and habitats for aquatic and terrestrial wildlife (HAB)

8 Increase in diseases, invasive species, and insect, animal, and plant pests (ILL)

9 Loss of wetland ecosystems and services (WET)

10 Increased frequency of extreme precipitation events and incidence and magnitude of damaging floods (FLOOD)

11 Increased incidence of landslides (SLIDE)

Climate change: Goals and Actions

Goal: Use the best available science, technology and management tools to determine the vulnerability of species and habitats to climate change at a landscape scale.

Climate change is a global issue, and the responses of fish, wildlife, and habitats to changing climate conditions will play out across political boundaries and require a new, more integrated approach to management. As a result, evaluation and planning needs to be done at a landscape scale. Many species may shift ranges so that they are no longer found within the borders of a particular state or protected area, therefore efforts to evaluate and mitigate vulnerability should focus on how a species or habitat will respond across the landscape.

Actions:

Action: **Work with partners to increase information on climate change vulnerability of habitats and species.**

- Building a body of information on climate change impacts and the vulnerability of strategy species and habitats is an important first step to guiding management and policy decisions on climate change.

  Management priorities should drive the scientific information that is gathered to inform decisions. Collaboration with research institutions, university, EFCC, and other relevant organization

Action: Support long-term research on climate trends and ecosystem responses.

To provide needed information on climate impacts on species and habitats, research and monitoring efforts will need to be conducted over longer time periods of time. Long-term funding and institutional support will be needed to encourage long-term research. Existing long-term ecological research
programs.

Action: Develop and implement monitoring and evaluation techniques for vulnerable Strategy Species and Strategy Habitats.

Because of the changes expected under future climates, new decision tools will be needed to help determine appropriate management actions. There is a need to develop monitoring protocols that can quickly detect climate related shifts in populations and habitats, help tie existing and proposed
management with on-the-ground results, and inform and refine vulnerability assessments. Evaluating actions will be critical to coping with future climate uncertainties. To make the most efficient use of available funding, monitoring should be coordinated and shared among relevant agencies and
organizations. Monitoring across boundaries and jurisdictions will form the basis for decision-making in a variable and rapidly changing environment.

Key Conservation Issue: Invasive Non-native Species

When an invasive species is introduced into new environment, it leaves behind the natural enemies such as predators, disease or parasites that controlled its population growth in its original home. Without this
control, species can quickly expand, out-competing and overwhelming native species that may not have
evolved the necessary survival strategies to fend off unfamiliar species or diseases.

Assessing risk, prioritizing management

Evaluating the potential danger associated with the introduction of a new species is sometimes very difficult due to unknown variables on how the species will respond in a new environment or which species might arrive within the state. Many invasive species, especially those that are aquatic (such as invasive tunicates) can be difficult to detect before they pose a large threat. Once invasive species are established, controlling them

can be difficult, expensive, and in some cases impossible. Priority must be placed on preventing the introduction of new species. Also, not every new non-native species is equally threatening, so gauging the level of risk and responding accordingly is important to avoid misallocating limited resources on species of low ecological concern.

Table1. Management approaches for invasive species:

Management Approach	**Reason for Approach**
Education	Inform the public about the impacts and costs of invasions
Prevention	Preventing new species introductions is a top priority and most cost-effective approach to protecting native species, ecosystems and productivity of the land from invasive species.
Assessment/Risk Analysis	Defining the level of concern and risk associated with new introductions through an assessment process will help to identify the worst invaders and management priorities.
Monitoring	the importance of surveying cannot be overestimated when looking for first-time infestations of undesirable non-native species or evaluating efforts to control existing occurrences.
Early detection	Early discovery of infestations of previously undocumented non-native species is critical to controlling their spread and achieving complete eradication.
Rapid Response	immediate treatment of new, isolated infestations will maximize eradication success and decrease the likelihood of populations expanding beyond the initial area of introduction.
Containment	Preventing invasive species from ‘hitchhiking’ via vulnerable pathways will slow the advance of well-established invasive species into unaffected areas. Some invasive species are tolerable if infestations can be contained and their impacts minimized.
Restoration	A system-wide approach to treating invasive species should

	consider habitat restoration as part of the ecological healing process. Helping native species and ecosystems recover is an important step following the removal of harmful species.

Self-check 3	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

1. what is the criteria for prior conservation of a given site? (2pts)
2. List the impacts of climate change on the environment (4pts)
3. What are the key conservation strategy to manage invasive spp (6pts)
4. What is conservation? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 4- Preparing longitudinal projections of continuing impacts

Introduction

Projection is not only for estimation of the characteristics of a longitudinal process but also for prediction of how the process will evolve in the future. The focus of such predictions can take various forms: a measurement of the process at a given time in the future, the time taken to reach a certain threshold or a probability statement about exceeding a given level at a future time.

A longitudinal study deals with “the growth and change of an individual or group over a period of years”

A program impact evaluation focuses on outcome measures

longitudinal impact evaluation determines the pattern and persistence of over time. Planning projections also suggest that new technology outcomes and measure

Self-check 4	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

5. what is the criteria for prior conservation of a given site? (2pts)
6. List the impacts of climate change on the environment (4pts)
7. What are the key conservation strategy to manage invasive spp (6pts)
8. What is conservation? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 5- Land capability assessment

Introduction

Land Capability- may be defined as a ranking of the ability of land to sustain a range of agricultural land uses without degradation of the land resource. Until now it has been an interpretive and somewhat subjective, assessment based on the physical limitations and hazards of the land, potential cropping and pastoral productivity, and the versatility of the land to produce a range of agricultural goods without damage to the land resource.

Land capability classification is an internationally recognized means of land classification, used to evaluate the capability of land to support a range of land uses, on a long-term sustainable basis

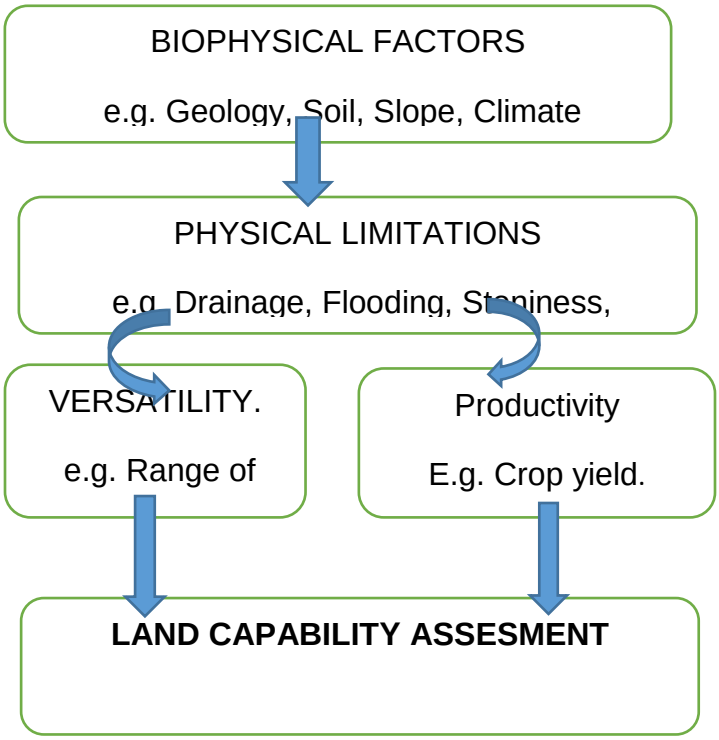


Figure 1. Factors in land capability assessment

Land capability assessment considers the physical nature of the land (e.g. geology, soils, slope) plus other factors (e.g. climate, erosion hazard, land management practices) which determine how that land can be used without destroying its long-term

potential for sustainable agricultural production. It also considers limitations that might affect agricultural use, e.g. stoniness, drainage, salinity or flooding.

Land capability assessment is therefore based on the permanent biophysical features of the land (including climate), and does not consider the economics of agricultural production, distance from markets, social or political factors.

Land capability classification gives a grading of land for broadscale agricultural uses, whereas land suitability is applied to more specific, clearly defined land uses, such as land 'suitable' for carrots.

5.1. land capability classification

There are generally three levels to the land capability classification:

1. The land capability class - which gives an indication of the general degree of limitation to use
2. subclass - which identifies the nature of the dominant limitation and
3. the unit - which group together similar types of land requiring the same kind of management, the same kind and intensity of conservation treatments, and which occur on soils which are adapted to the same kinds of crops, with similar potential yields.

Class Definitions

Land capability class definitions are as follows:

CLASS 1 - Land well suited to a wide range of intensive cropping and grazing activities. It occurs on flat land with deep, well drained soils, and in a climate that favors a wide variety of crops. While there are virtually no limitations to agricultural usage, reasonable management inputs need to be maintained to prevent degradation of the resource. Such inputs might include very minor soil conservation treatments, fertilizer inputs or occasional pasture phases. Class 1 land is highly productive and capable of being cropped eight to nine years out of ten in a rotation with pasture or equivalent without risk of damage to the soil resource or loss of production, during periods of average climatic conditions.

CLASS 2 - Land suitable for a wide range of intensive cropping and grazing activities. Limitations to use are slight, and these can be readily overcome by management and minor conservation practices. However, the level of inputs is greater, and the variety

and/or number of crops that can be grown is marginally more restricted, than for Class 1 land. This land is highly productive but there is an increased risk of damage to the soil resource or of yield loss. The land can be cropped five to eight years out of ten in a rotation with pasture or equivalent during 'normal' years, if reasonable management inputs are maintained.

CLASS 3 - Land suitable for cropping and intensive grazing. Moderate levels of limitation restrict the choice of crops or reduce productivity in relation to Class 1 or Class 2 land. Soil conservation practices and sound management are needed to overcome the moderate limitations to cropping use. Land is moderately productive, requiring a higher level of inputs than Classes 1 and 2. Limitations either restrict the range of crops that can be grown or the risk of damage to the soil resource is such that cropping should be confined to three to five years out of ten in a rotation with pasture or equivalent during normal years.

CLASS 4- Land primarily suitable for grazing but which may be used for occasional cropping. Severe limitations restrict the length of cropping phase and/or severely restrict the range of crops that could be grown. Major conservation treatments and/or careful management is required to minimize degradation. Cropping rotations should be restricted to one to two years out of ten in a rotation with pasture or equivalent, during 'normal' years to avoid damage to the soil resource.

CLASS 5- This land is unsuitable for cropping, although some areas on easier slopes may be cultivated for pasture establishment or renewal and occasional fodder crops may be possible. The land may have slight to moderate limitations for pastoral use. The effects of limitations on the grazing potential may be reduced by applying appropriate soil conservation measures and land management practices.

CLASS 6- Land marginally suitable for grazing because of severe limitations. This land has low productivity, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use. This land should be retained under its natural vegetation cover.

CLASS 7- Land with very severe to extreme limitations which make it unsuitable for agricultural use.

Self-check 5	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

1. Define land capability? (3pts)
2. What is the d/c b/n land capability classification & land capability assessment (4pts)
3. List and discuss land capability class (7pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 6- Identifying and Documenting Opportunities and Constraints

Introduction

Opportunities are those site characteristics that may encourage certain types of use or development. For example, a site that provides scenic vistas would be a desirable destination for both picnickers and hikers. Constraints are those characteristics that might limit or restrict use.

A useful way of assessing opportunities and constraints is to carry out what **is known as a SWOT analysis**. Strengths and weaknesses are internal to an organization. Typically, they relate to the resources of the organization, and its structure and leadership, as well as the extent of its marketing. Examples include steep slopes or sensitive wildlife habitat.

6.1. Constraints

There are three different types of Areas facing Natural Constraints (ANCs):

Mountain areas are characterized by a considerable limitation of the possibilities for using the land and by an appreciable increase in production costs due to:

a) the existence, because of altitude of very difficult climatic conditions, the effect of which is to substantially shorten the growing season

b) at a lower altitude, the presence over the greater part of the area in question of slopes too steep for the use of machinery or requiring the use of very expensive special equipment

c) a combination of these two factors, where the constraints resulting from each taken separately are less acute but the combination of the two gives rise to equivalent constraints.

The designation of areas facing significant natural constraints other than mountain is based on a set of eight common biophysical criteria: low temperature, dryness, excess soil moisture, limited soil drainage, unfavorable texture & stoniness, shallow rooting depth, poor chemical properties and slope.

This biophysical delimitation is followed by a fine-tuning exercise in which those areas are identified where the natural constraints have been overcome by investment or economic activity.

Examples of this could be the use of drainage, irrigation or greenhouses.

Before defining the specific management objectives for the protected area, the constraints on its management should be identified, as should any major threats to the area's values. Some constraints are a function of the natural environment. Examples are the eco logical processes which exist in the area, the presence of unique and vulnerable features, the relative rarity of the resource and any other aspects which may be identified.

Constraints may take other forms, such as:

- legal obligations
- constraints of tenure
- prior usage (for example an established fishery or mining operation)
- health and safety considerations
- managerial constraints
- priority activities and uses (which must be given precedence in the plan)
- obligations to neighbors, visitors etc.; and
- other policy considerations

Hazard constraint

Natural hazards that were incorporated into the opportunities and constraints analysis include: flooding areas, highly unstable steep slopes, potential landslides, and earthquake fault zones, known as Alquist Priolo Zones. Other factors that may serve to constrain future development include liquefaction zones, new or unknown landslide areas, unstable soils, etc. These factors must be considered in the analysis of site-specific development proposals.

Types of constraints

1**. Agricultural land constraints** - Limited land area and expansion of agriculture

2. Physical Constraints - The capacity of human and natural systems to adapt to a changing climate is linked to characteristics of the physical environment including the climate itself.

3. Biological Constraints- Soil degradation and desertification leads to loss fauna and flora.

4. Financial Constraints- poor costs of adaptation and management

Self-check 6	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

1. Write the three types of Areas facing Natural Constraints? (3pts)
2. List down the types of constraint (4pts)
3. Explain the d/c b/n opportunity & constraint (7pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 7- Under taking Presentation to stakeholders/clients

Introduction

The presentation, style and content of the completed Management Plan can have a great influence on whether it is well received and understood by users, including the public, and whether it effectively communicates the values of the protected area and the proposed actions contained in the plan. These features will also affect its implementation and the extent of public support for designated area management.

7.1. Components of presentation

1. Know your audience

You may have heard this before, but it is really important. An audience of senior managers isn't going to want to know about the issue with the code you found last week or how the construction contract is working out. They will want to know what it means for them and their teams in terms of sales, customer service, and the big picture. They want to know what they have to do now to take advantage of the new project deliverables and how to help their own staff through the changes. On the other hand, an audience of end users will want to know exactly how their work processes will change as a result of your project and you'll probably get a lot of technical or functional questions relating to their day-to-day work. Focus on whatever is important to your audience and make sure you anticipate the kind of questions that they will ask.

2. Present clearly

Practice your presentation. Make sure that people can hear you. That might mean using a microphone if it is a big room, for example, a Town Hall-style presentation. Practice with the mike if you can as it will give you the confidence to use it on the day. Use clear language: try to avoid project jargon or abbreviations that only you and the project team know. Make sure the words on your slides or project plan can be seen from the back of the room.

3. Use visual aids

People like pictures. It gives them something to focus on during the presentation and it's also a help for you as it gives you a prop. Have an excerpt of your project plan on a slide presentation or even better, show your project plan online with a viewer

4. Practice for questions

Think about what sort of questions your audience will ask you and be prepared. If you are worried that no one will ask any questions you can seed the audience and ask a friend to ask you a question (make it one that you know the answer to!). Being the first to ask a question can often put people off so having someone else go first can then suddenly open up the floor.

5. Collect feedback

Remember that your client or stakeholders don't know exactly what kind of feedback you expect from them. Therefore, to get a fair assessment of your decisions, listen to everyone who has suggestions

Self-check 7	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (6 point)

1. Write the five types of effective presentation? (3pts)
2. What is the importance of feedback after presentation? (3pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

LG #27	**LO5: Identify Participatory Management Strategies**

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Identifying management strategies
- Designing management strategy
- Costing and comparing management strategies
- Planning to prioritize outcomes and management resource allocation
- Consultation with stakeholders/clients

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Identified management strategies that address defined objectives.
- Design management strategies to alleviate existing impacts or to target management actions.
- Cost and compare management strategies to existing budgets and available resources.
- Plan Steps of work to prioritize outcomes and management resource allocation.
- Undertake Consultation with stakeholders/clients and incorporate feedback into planning documentation

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets
7. Perform “the Learning activity performance test” which is placed following “Operation sheets”
8. If your performance is satisfactory proceed to the next learning guide,
9. If your performance is unsatisfactory, see your trainer for further instructions or go back to “Operation sheets”.

Information Sheet 1- Identifying Management Strategies

Introduction

Basic concepts of strategy

Strategy is a comprehensive action plan that identifies long-term direction for an organization and guides resource utilization to accomplish organizational goals with sustainable competitive advantage

When an organization has a long-term purpose, articulated in clear goals and objectives, and these goals and objectives can be rolled up into a coherent plan of action, then we would say that the organization has a strategy. It has a good or even great strategy when this plan also takes advantage of unique resources and capabilities to exploit a big and growing external opportunity. Strategy then, is the central, integrated, externally-oriented concept of how an organization will achieve its objectives.

Strategic management is the process of formulating and implementing strategies to accomplish long-term goals and sustain competitive advantage.

Strategic management is the body of knowledge that answers questions about the development and implementation of good strategies.

It is important to all organizations because, when correctly formulated and communicated, strategy provides leaders and employees with a clear set of guidelines for their daily actions.

Simply, strategy is about making choices

5.1. management strategies

Management strategies may be These should address the conservation priorities identified in the site description and may include objectives to protect the natural resource area from grazing and pest animals, control pest plants and diseases, control human impact, manage fire events (e.g., controlled use of hot and cold fires, wildfire prevention), establish vegetation links to nearby habitat islands, remove and redirect

infrastructure such as roads, troughs and fences, conserve and enhance biodiversity and habitat balance, and monitor native habitats over time.

This Learning guide identifies the major items to be addressed through management recommendations (e.g. land-use conflicts, invasive species, natural disturbances, rehabilitation, visitor control, etc.). What approaches or recommendations will be taken to manage the property? This is an important part as it will guide what activities happen on the property over the next three, five, ten or twenty years. List both the short-term and long-term goals for the property. This can be done using input from the volunteer property management teams, the Board of Directors and local neighbors of the property. The types of questions to ask now are:

- Will the property be left alone as a nature reserve?
- Will the public be allowed to access the property and if so how?
- Will the site be used for education and interpretation purposes?
- How will the property be affected by outside influences?

Once the goals are set, you can start to set out some recommendations. These recommendations should have timelines. The land trust can use these timelines when volunteers undertake activities. While the purpose of a management plan is to think long-term for the site, it may be necessary to address more immediate needs. For example, a boardwalk may be recommended as an immediate activity as there is concern of degradation of the surrounding wetland if the public has access to the site, while interpretive signage might be something you could do later. Assign costs to each of the recommendations; this will help to guide the Board in setting annual budgets for their properties. Although this does not need to be included in the management plan, it could be created as a management plan budget. Once plans have been prepared, they should be approved by the Board and then shared with volunteers on management teams.

1. Characteristics of a useful strategic plan

- A set of priorities. Setting priorities allows for the plan to be adjusted according to changing needs or resources.
- Achievable, measurable, and time sensitive. Remember, it's better to do a few things well than many things poorly. The plan should contain goals that are measurable and have deadlines.
- Flexible and responsive to changing conditions. The plan is a road map that may contain unforeseen detours such as unexpected crises, new opportunities, or changes in resources.
- Short and simple. Plans that are more like a book will sit on a shelf. Keep it focused on the most important things to accomplish.
- A unit, not a menu. A useful plan is not a wish book. Everything in the plan needs to be accomplished.
- The means to an end, not an end in itself. The plan is the process by which it reaches its destination; it is not the destination.
- Based on a three- to five-year period. The strategic plan should be a living document that has a one-year drop off and a new year added so that it always covers the same time period

2. Components of strategic planning

Strategic planning's three main components are plan development, plan execution, and plan review.

A. Plan Development - is the first component of strategic planning. During this stage, the following steps should be completed.

1. Assess the association's history and significant accomplishments. Develop a history of the association. List important milestones that brought the association to where it is today. In order to help visualize how the association has changed over the years, include items where impact occurred in the association's operations, such as: hiring additional staff, upgrade computer hardware/software, changing processes significantly, raising dues, building additional facilities, rebuilding/renovating existing facilities, etc., by dates and quantities/dollars, as appropriate.

2. Assess the association's current status. Determine the association's current status by looking at such things as the state of the facilities, infrastructure of the operations, the financial statements, the demographics of the population, and so forth. 3. Evaluate the association's current governance structure. Review the operations to determine how responsibilities are assigned, defining communications and authorities. Examine policies, procedures, and desk guides available to determine the chain of command within the association's staff, within the board, and for oversight and communications between the staff or property management company and the board of directors.

4. Develop mission and vision statements. The vision statement is the image or state to which the association aspires. It emphasizes the dream of where the association will be at a specific time. The mission statement is the organization's purpose stated in a memorable phrase.

5. Determine operating values. Also called guiding principles, these values state the association's intentions and expectations. They are used to judge the association's policies and actions, as well as individual conduct. Associations should include values such as: the importance of customers and customer service; commitment to quality and innovation; importance of honesty; integrity and ethical behavior; corporate citizenship; respect for the employee and duty the association has to its employees; and importance of safety and protecting the environment, etc.

6. Perform a needs assessment. Determine the needs of the association by analyzing the present state of the community, addressing any critical issues, and identifying the association's strengths, weaknesses, opportunities, and threats

7. Determine critical issues. List the critical issues faced by the association that must be addressed for the association to achieve its mission and vision, based on an assessment of its strengths, weaknesses, opportunities, and threats.

Assessment of strengths, weaknesses, opportunities, and threats (SWOT)

I. Strengths. List the organizational attributes that promote the association's ability to meet its mission and vision.

II. Weaknesses. List those organizational attributes that hamper the association's ability to meet its mission and vision. Some examples include inadequate

technology or use of technology, lack core competency training, poor service, and so forth.

III. Opportunities. List those factors, internal and external, that would enable the association to meet its mission and vision. Some examples include technological advances in needed areas, consolidation

IV. Threats. List those factors, internal or external, that would hamper the association from meeting its mission and vision. Some examples include high rate of foreclosures, drawn out worker strike, change in developer focus, etc

8. Define the roles of key players. Who will be the key people responsible for each aspect of the strategic plan? Answer questions such as: What level of control will the board have? Is the manager going to be a proactive leader or an administrator?

9. Educate and communicate the plan. Without education and communication, team members can neither perform their roles nor effectively interact with each other. Make sure that every player has the necessary documents and basic knowledge to perform effectively.

10. Develop and prioritize long-range goals. Develop long-range goals to address the critical issues identified through the need's assessment; then prioritize those goals.

11. Develop short-term goals and action plans. Establish short-term goals and specific action plans along with scheduled completion dates.

12. Monitor the progress. Establish a monitoring process to assess the progress made on both short-term and long-range goals

B. Plan Execution - is the second phase of strategic planning. In this step, an association puts its plan into action through the allocation of resources. This step has three components:

1. Programs. Association programs serve as blueprints for converting objectives into realities.

2. Procedures. Procedures are the specific sequence of tasks required to complete the programs.

3. Budgets. An association should prepare budgets to fund programs. Instead, many develop programs based on their budgets. Simply put, an association should be strategy-driven, not budget-driven.

C. Plan Review - is required constantly to improve the plan and ensure its execution. Part of the plan review occurs naturally when there's board turnover, a new homeowner, or changes in the law. In addition, plan review needs to be scheduled to ensure the plan is meeting the community's goals. This can be achieved through surveys, management review conferences, or discussions at meetings. If the community fails to update the plan, the plan will eventually fail the community. Industry experts suggest that associations and their managers review their strategic plans annually and completely overhaul their strategic plans every three to five years

Self-check 1	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (10 point)

1. Explain management strategy? (2pts)
3. write the three main components Strategic planning's (3pts)
4. Write down the characteristics of good strategic planning (3pts)
5. Define strategy in case designated area conservation (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Information Sheet 2- Designing Management Strategy

Introduction

Design management is a field of inquiry that uses project management, design, strategy, and supply chain techniques to control a creative process, support a culture of creativity, and build a structure and organization for design. The objective of design management is to develop and maintain an efficient work environment in which an organization can achieve its strategic and mission goals through design. Design management is a comprehensive activity at all levels working area (operational to strategic), from the discovery phase to the execution phase. "Simply put, design management is the business side of design. Design management encompasses the ongoing processes, business decisions, and strategies that enable innovation and create effectively-designed products, services, communications, environments, and brands that enhance our quality of life and provide organizational success." The discipline of design management overlaps with marketing management, operations management, and strategic management.

Design strategy refers to an integrated planning process that examines the relationships between how design and business may complement one another.

Simply put, the goal is to merge the business objective with creative solutions that moves beyond just aesthetics

Traditionally, design management was seen as limited to the management of design projects, but over time, it evolved to include other aspects of an organization at the functional and strategic level. A more recent debate concerns the integration of design thinking into strategic management as a cross-disciplinary and human-centered approach to management.

“Design offers a different approach and suggests processes that are more widely participative, more dialogue-based issue-rather than calendar-driven, conflict-using rather than conflict-avoiding, all aimed at invention and learning, rather than control. If we were to take design’s lead, we would involve more members of the organization in two-way strategic conversations. We would view the process as one of iteration and

experimentation, and pay sequential attention to idea generation and evaluation in a way that attends first to possibilities before moving onto constraints."

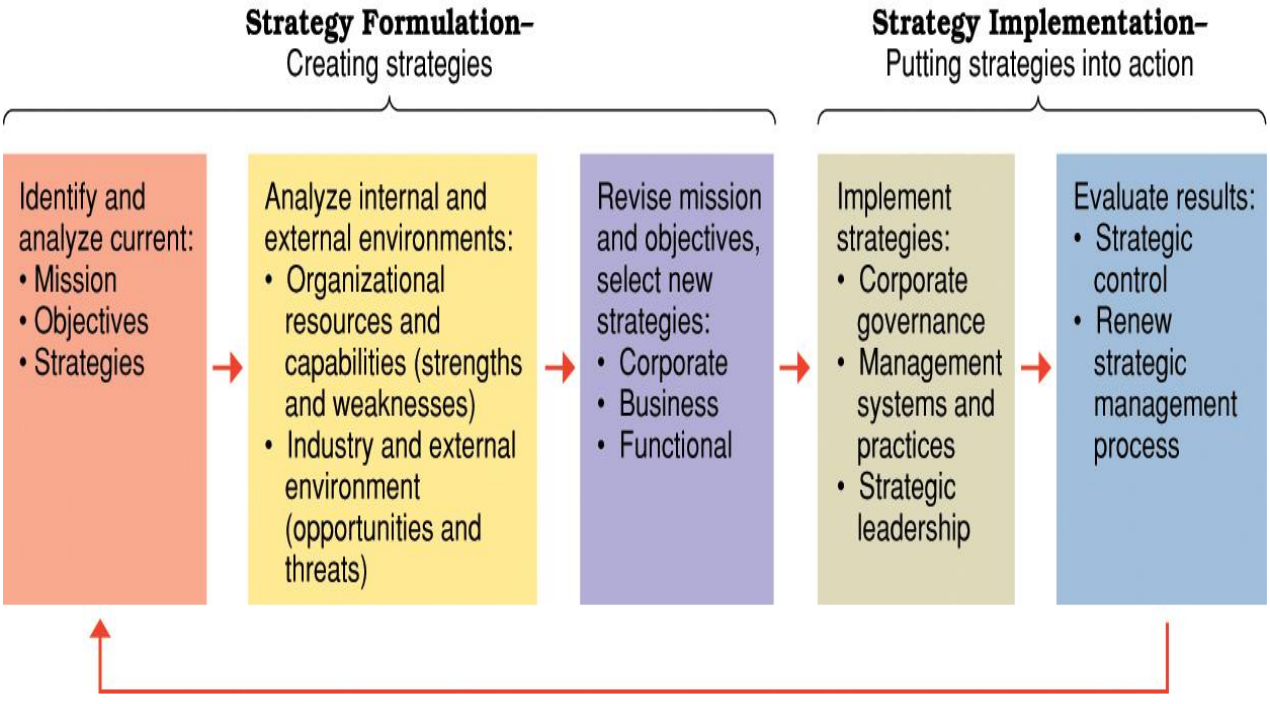
The role of design in strategy development

Design should be regarded as a key resource for strategy formulation in any organization. Designers always look at the bigger problem, stepping above the issue, looking at it strategically, and solving the problem by collaborating, using different resources, skills and people for a positive solution.

Strategy comes into play in design when a designer transition from focusing on a product to a collection of products. They become a partner to the entire (development) process. The designer's role is concerned what can be done to pragmatically bring about change, rather than simply maintaining the status quo.

Design strategy is crucial to the design process as designers have to think of the bigger picture. They have to consider how to take a company forward and do something innovative with design.

Designing strategy formulation and implementation



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2.1. Principles for good strategic design

1. Good strategic design is as little strategic design as possible

Less, but better – because it concentrates on the essential aspects, and the products are not burdened with non-essentials.

2. Good strategic design is honest

Good strategic design does not make something more innovative, powerful or valuable than it really is. It does not attempt to manipulate with promises that cannot be kept.

3. Good strategic design is unobtrusive

Strategies fulfilling a purpose are like tools. They are neither decorative objects nor works of art. Their design should therefore be both neutral and restrained, to leave room for the user's self-expression.

4. Good strategic design makes a strategy understandable

Good strategic design clarifies the strategy's structure. Better still, it can make the strategy talk. At best, it is self-explanatory. No jargon, technical complications or clever smokescreens required.

5. Good strategic design must be useful

Good strategic design must fulfil certain criteria, not only functional, but also psychological. It should emphasize the usefulness of its outcome whilst disregarding anything that could possibly detract from it.

6. Good strategic design is long-lasting

Good strategic design avoids being fashionable and therefore never appears antiquated. Unlike fashionable design, it lasts many years – even in today's throwaway society.

7. Good strategic design is thorough down to the last detail

Despite being as simple as possible nothing must be arbitrary or left to chance. Care and accuracy in the strategic design process shows respect towards the user.

8. Good strategic design is innovative

Good strategic design is innovative yet innovation can never be seen to be 'an end in itself'. This is particularly important for strategic designers who often are blinded by the desire to always come up with something new and shiny.

9. Good strategic design is aesthetic

This is a bit more difficult to translate the aesthetic into the strategic design domain, However Rams sees the aesthetic quality of a product to be integral to its usefulness because products we use every day affect our person and our well-being. In such a way strategic planning should also be seen to be connected to our everyday lives – not just an esoteric activity. And, if not too far a stretch, it should ultimately enhance out lives.

10. Good strategic design is environmentally-friendly

Good strategic design makes an important contribution to the preservation of the environment. It conserves resources and minimizes physical and visual pollution throughout the lifecycle of its products.

The Five Stages of Design Thinking

Stage 1: Empathize- Research Your Users' Needs

Here, you should gain an empathetic understanding of the problem you're trying to solve, typically through user research. Empathy is crucial to a human-centered design process such as design thinking because it allows you to set aside your own assumptions about the world and gain real insight into users and their needs.

Stage 2: Define- State Your Users' Needs and Problems

It's time to accumulate the information gathered during the Empathize stage. You then analyze your observations and synthesize them to define the core problems you and your team have identified. These definitions are called problem statements. You can create personas to help keep your efforts human-centered before proceeding to ideation.

Stage 3: Ideate- Challenge Assumptions and Create Ideas

Now, you're ready to generate ideas. The solid background of knowledge from the first two phases means you can start to "think outside the box", look for alternative ways to view the problem and identify innovative solutions to the problem statement you've created. Brainstorming is particularly useful here...

Stage 4: Prototype- Start to Create Solutions

This is an experimental phase. The aim is to identify the best possible solution for each problem found. Your team should produce some inexpensive, scaled-down versions of the product (or specific features found within the product) to investigate the ideas you've generated. This could involve simply paper prototyping.

Stage 5: Test- Try Your Solutions Out

Evaluators rigorously test the prototypes. Although this is the final phase, design thinking is iterative: Teams often use the results to redefine one or more further problems. So, you can return to previous stages to make further iterations, alterations and refinements – to find or rule out alternative solutions.

Overall, you should understand that these stages are different modes which contribute to the entire design project, rather than sequential steps. Your goal throughout is to gain the deepest understanding of the users and what their ideal solution/product would be.

Self-check 2	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

1. What is design strategy? (1pts)
2. What is the role of design in strategy (4pts)
3. Write down the stages of design thinking (4pts)
4. Write at least five principles for good strategic design (5pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 7 points** **Unsatisfactory - below 7 points**

Information Sheet 3- Costing and Comparing Management Strategies

Introduction

Cost is the amount of resource given up in exchange for some goods or services. The resources given up are money or money's equivalent expressed in monetary units.

For a consumer cost means price. For management cost means 'expenditure incurred' for producing a particular product or rendering a particular service. The process of ascertaining the cost is known as costing. It consists of principles and rules governing the procedure of finding out the costs of goods/ services. It aims at ascertaining the total cost and also per unit cost.

It is necessary to specify the exact meaning of "cost". When the term is used specifically, it is modified with such terms as prime cost, fixed cost, sunk cost, etc. Each description implies a certain characteristic which is helpful in analyzing the cost.

Costing is the techniques and processes of ascertaining costs. These techniques consist of principles and rules which govern the procedure of ascertaining cost of products or services. The techniques to be followed for the analysis of expenses and the processes of different products or services differ from industry to industry.

The main object of costing is the analysis of financial records, so as to subdivide expenditure and to allocate it carefully to selected cost centers, and hence to build up a total cost for the departments, processes or jobs or contracts of the undertaking.

A cost management plan is a document that helps you map and control a budget. It enables project managers to estimate their costs, allocate resources to the right areas, and control overall spending.

Cost management plans keep all project costs in one place, including direct and indirect costs. A project manager will track these costs to ensure there are no budget overruns.

Cost accounting provides invaluable aid to management. It provides detailed costing information to the management to enable them to maintain effective control over stores and inventory, to increase efficiency of the organization and to check wastage and losses. It facilitates delegation of responsibility for important tasks and rating of

employees. For all these, the management should be capable of using the information provided by cost accounts in a proper way.

3.1. Elements of cost

There are three broad elements of costs:

(1) Material: The substance from which the product is made is known as material. It can be direct as well as indirect. Direct material: It refers to those materials which become a major part of the finished product and can be easily traceable to the units. Direct materials include:

(i) All materials specifically purchased for a particular job/process.

(ii) All material acquired and latter requisitioned from stores.

(iii) Components purchased or produced.

(iv) Primary packing materials.

(v) Material passing from one process to another.

Indirect material: All material which is used for purposes ancillary to production and which can be conveniently assigned to specific physical units is termed as indirect materials. Examples, oil, grease, consumable stores, printing and stationary material.

(2) Labor: Labor cost can be classified into direct labor and indirect labor. Direct labor: It is defined as the wages paid to workers who are engaged in the production process whose time can be conveniently and economically traceable to units of products

(**3) Expenses**: Expenses may be direct or indirect. Direct expenses: These expenses are incurred on a specific cost unit and identifiable with the cost unit. Examples are cost of special layout, design or drawings, hiring of a particular tool or equipment for a job; fees paid to consultants in connection with a job etc. Indirect expenses: These are expenses which cannot be directly, conveniently and wholly allocated to cost Centre or cost units. Examples are rent, rates and taxes, insurance, power, lighting and heating, depreciation etc.

Key actions for integrating strategy and strategic cost management

The finance function requires effective, decisive, and inspirational leadership to create a strong link between strategy and strategic cost management.

The head of the finance function should drive corporate governance and compliance in strategic cost management. Finance personnel should incorporate “strategic thinking” when addressing cost management using the following steps:

- **Communication.** Strategy and its integration with strategic cost management should be clearly articulated, concise, and easy to understand.
- **Cost differentiation.** Differentiate between costs that are relevant to strategy and have a long-term, sustainable impact in the achievement of relevant organizational objectives versus costs that are irrelevant, add no value, and therefore are irrelevant in any form of decision-making to support corporate objectives.
- **Change management.** Adopt an effective change management strategy that will align strategy and strategic cost management activities. This will ensure that the finance team embraces the new strategy to associate and integrate it with cost management. It is imperative that change management embeds the objectives of job rotation and multiskilling, ensuring finance professionals work in specific business functions with a strategic focus to develop skills in understanding and developing strategies.
- **Technology.** Using systems and processes that integrate strategy with strategic cost management is crucial in achieving a strategic focus on cost management. Technology should be an enabler for creativity and innovation in the finance function to further enhance the integration of strategy with strategic cost management.

Importance of cost management plan

A cost management plan is important because it creates a detailed outline of your project budget. It helps project managers to stay organized and on track to hit their project deliverables.

If you don’t estimate costs accurately, allocate sufficient resources where they are needed, and regularly monitor spending, you run the risk of budget overrun. This can

lead to project failure. Therefore, cost planning in project management is an essential exercise in ensuring project success.

A project cost management plan can also be highly beneficial for cutting unnecessary costs. One of the biggest challenges project managers face is an overstretched budget with no clear indication of excess spending. According to Harvard Business Review, “to cut costs effectively, companies must connect costs to their strategy.” A cost management plan will help project managers to assess cost priorities and save money.

How to make a cost management plan

To make a project cost management plan, you need to follow four simple steps:

1. **Break work into tasks**: Build a work breakdown structure with folders and subfolders, which you can break down further into tasks and subtasks. A useful tool such as Wrike Resource will help you pick the right person for each task.
2. **Estimate your costs**: Create a cost estimation forecast for your project. Include your direct and indirect costs, cut unnecessary spending, and budget for unforeseen events. Ensure you use flexible software as your forecast is subject to change.
3. **Create your budget**: Once your cost estimation is complete, you can go into more detail with your actual budget. Use milestones in Gantt charts to separate your budget into stages for easier cost management.
4. **Monitor performance**: A cost control plan is vital in tracking performance. Match team progress to your expenses to date and ensure you are on schedule.

Self-check 3	**Written test**

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

1. What is cost (2pts)
2. What is the importance of estimating cost (4pts)
3. Write down elements of cost (6pts)
4. Who is responsible body to estimate cost? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 4- Planning steps of work to prioritize resource allocation

Introduction

Priority setting and resource allocation (PSRA) practices constitute processes and rationales applied to the key task of determining how resources (i.e., money, people, time) are allocated within management systems

Resources are limited and also the most expensive investment for any business. Therefore, how an organization utilizes its scarce resources has an impact

The resource allocation method is an essential component of the project management process. Many successful companies have implemented a comprehensive resource allocation framework with the help of appropriate tools and techniques.

4.1. Resource Allocation

1. Minimize project resource cost significantly:

Resource allocation tool helps you to identify and allocate the best-fit resource instead of first-visible resources. It enables you to deploy cost-effective global resources across matrix boundaries, thereby reducing project resource costs significantly. Resource allocation in project management maintains profitability by uniformly distributing resources across all projects instead of assigning them to a high priority one**.**

2. Maximize profitable resource utilization

Simply assigning all your resources to projects does not ensure profitability. They could be working on non-billable or mundane operational tasks. Businesses must ensure optimum resource utilization, and resource allocation helps achieve that and more. Using real-time information and forecasting methods, resource managers can take corrective measures to avoid under or overallocation in advance. Mobilizing resources from non-billable work and allocating them to strategic/billable work ensures profitability

3. Find the right resource using centralized visibility:

A resource allocation tool captures resource-related information in real-time and consolidates them on a centralized platform. 360-degree visibility helps assign resources to projects based on qualifications, skills, experience, availability, costs, and other selection criteria. Centralized visibility and real-time updates avoid data redundancy and discrepancies that could lead to double booking chaos. It is one of the significant benefits of resource allocation.

4. Deliver projects on time and within budget:

Delivering projects on time and within budget ensures project success, increases client satisfaction, and maintains your organization's reputation. Resource allocation in project management ensures that under or over skilled resources are not assigned to projects. Under skilled resources cause project delays, whereas overqualified team members can spike project resource costs. Therefore, resource allocation is critical to project management.

5. Diversify employee skill sets for increased billability:

Encouraging employees to possess multiple skills enhances their billability. Allocating resources on different projects allow them to build secondary skills in addition to sharpening their primary skills. Focused training programs and on the job experience further helps them to improve their capabilities. Secondary skills come in handy to make them billable if they are not deployable using primary skills.

6. Solve resource constraints with smart allocation techniques:

In a multi-project environment, intelligent allocation of resources involves generating more resource using the existing pool. What-if analysis allows you to build different scenarios and simulate each of them using the resource constraints. After comparing and analyzing each scenario, resource managers can help arrive at the best possible outcome. It can then be applied to the project schedule**.**

7. Improve employee engagement and productivity:

One of the resource allocation approaches involves assigning resources to project tasks based on their skills and interest. Providing an environment for self-development, skill-building, and staying abreast with current technology-trends, motivate them. By giving them the right opportunities, resource managers can effectively manage the bench and improve overall billability. The employees also feel more responsible and take ownership of their job, which increases engagement and productivity.

Summary of Resource Planning and Allocation

Do's

- Know the scope of your projects before carrying out resource planning and allocation. Is it a big or small project, long or short?

- Use proper resource planning and allocation tools to get a 360-degree view of all resources. It includes their skill, availability, booking details, etc.
- Establish a well-documented resource requesting process
- Get visibility of your pipeline projects in advance. Plan allocation with ghost resources that can be replaced by actual resources later.
- Build a strategy for contingent resources and freelancers in addition to full-time resources. Establish a few vendor organizations that can provide resources quickly. They can be utilized for short-term assignments.
- Encourage employees to acquire multiple secondary skills in addition to their primary skills. It will help to place them in a billable role.
- Encourage project managers to accept a certain number of resources matching 60-70% actual requirements. The remaining skill can be acquired on the job.
- Plan for runtime resource allocation for some of the high-priority projects.
- Track your scheduling details using resource allocation reports. Plan for the resources which are getting rolled off from the project on specific dates.
- Have an overall risk and its mitigation strategy on resource allocation for individual skill sets with particular emphasis on niche skills

Don’ts

- Do not over or under allocate resources. Burn rates will ultimately result in unplanned attrition.
- Balance the resource allocation activities across the organization. Do not give priority to certain projects at the cost of others.
- Do not allocate contingency resources for long-term or strategic projects. These positions need to be filled with regular full-time employees.
- Avoid hiring regular employees if you have short-term requirements and do not have visibility for future work. The contingent workforce can do this; otherwise, this will result in a higher bench.
- Reduce hiring/firing cycle for the resources. It will give a bad reputation to the organization. It can be controlled using effective resource capacity planning.

- Do not assign critical or expensive resources to the non-billable activities. This will be a waste of their skill set. Juniors resources or trainees can pick up non-billable tasks.
- All the high performers should not be allocated to a single project. Each project needs to have a combination of some high achievers, some average, junior resources, and contingency staff. It will help to create proper band-mix and increase profitability

Self-check 4	**Written test**

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (14 point)

8. What is cost (2pts)
9. What is the importance of estimating cost (4pts)
10. Write down elements of cost (6pts)
11. Who is responsible body to estimate cost? (2pts)

You can ask you teacher for the copy of the correct answers.

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

LG #28	**LO6. Prepare Participatory Management plan**

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Documentation of Site information and management strategies
- Consultation with stakeholders/clients
- Preparation and presentation of final plan

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Document Site information and management strategies into a draft management plan for consultation.
- undertake consultation with stakeholders and clients according to enterprise guidelines.
- Prepare and present changes made to the draft plan, and a final plan to client

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets
7. Perform “the Learning activity performance test” which is placed following “Operation sheets”
8. If your performance is satisfactory proceed to the next learning guide,
9. If your performance is unsatisfactory, see your trainer for further instructions or go back to “Operation sheets”.

Information Sheet 1- Management plan

Introduction

There are many definitions of management planning. Fundamentally, it is a subset of the more general discipline of planning. It has been applied to protected areas in some parts of the developed world since the middle of the 20th century and is now carried out across the globe but with varying degrees of success. It is a 'tool' to guide managers and other interested parties on how an area should be managed, today and in the future. Its effectiveness depends on a number of factors which will be outlined in more detail in later chapters. As a management tool, planning helps protected area managers to define and then achieve the mandate of the protected area under their care

Management planning does not end with the production of the plan, important as this might be. Good practice requires that ongoing monitoring take place to test the effectiveness of the plan.

A management plan is a document that guides all aspects of the reserve operation, administration, and use.

The core of the management plan outline has four sections: 1) user programs, 2) conservation and stewardship programs, 3) administration, and 4) facilities.

A conservation management plan is a document which sets out the significance of a heritage asset, and how that significance will be retained in any future use, management, alteration or repair.

Management Plans should be brief documents that identify the key features or values of the designated area, clearly establish the management objectives to be met and indicate the actions to be implemented. They also need to be flexible enough to cater for unforeseen events which might arise during the currency of the plan.

6.1. Management plan

A management plan is a blueprint for the way your organization is run, both day-to-day and over the long term. It includes the standard methods for doing various things -- handling money, dealing with the actual work of the organization, addressing the way people in the organization do their jobs -- and the overall philosophical and intellectual framework in which these methods operate.

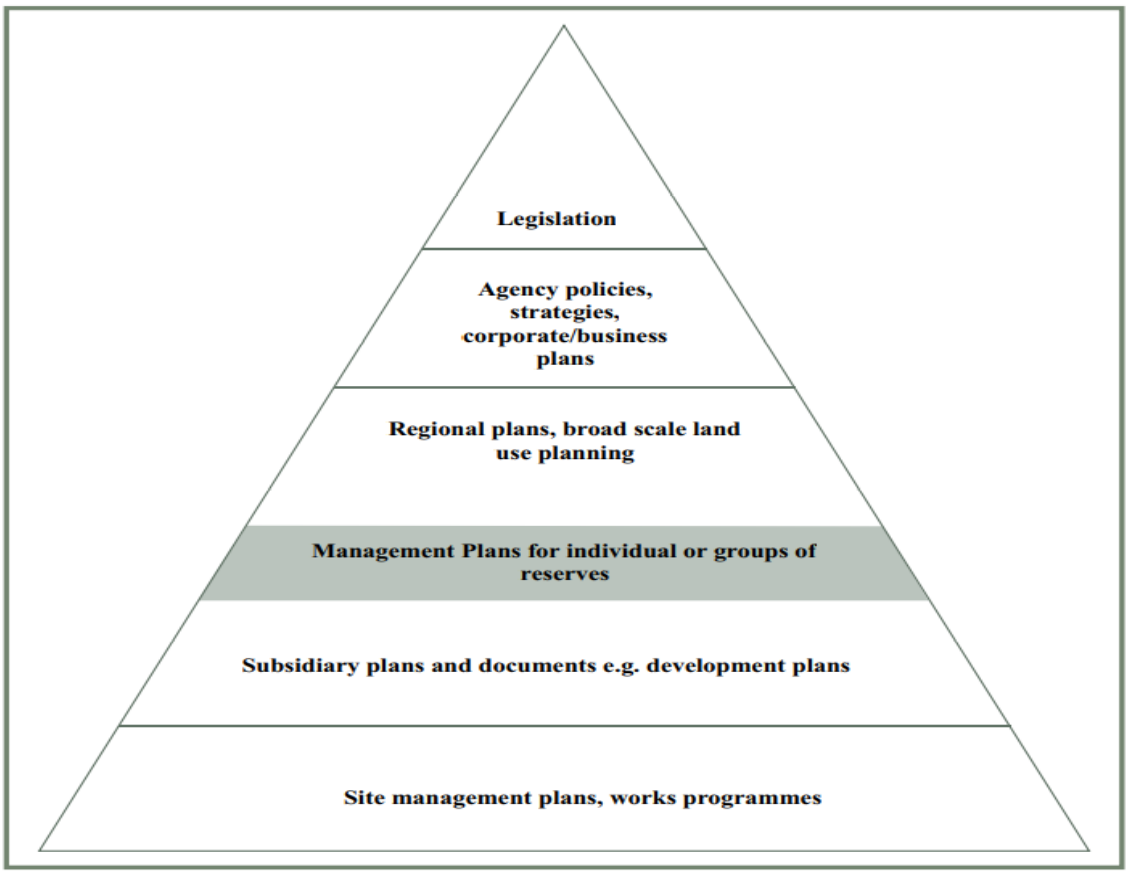
The management plan for your particular organization depends on a number of factors:

- What is the organization trying to accomplish? A neighborhood initiative that exists to achieve a single goal -- keep a historic building from being torn down, preserve a piece of open space, build a playground -- has very different management needs than, say, a health clinic that plans to serve the community for years. Issues that are both important and ongoing for the clinic (staff pay and benefits, for instance) may simply not exist for the other organization.
- What actually needs to get done day-to-day to keep the organization running? The actual tasks that keep the organization alive, maintain its standing with funders and the community, and allow it to accomplish its goals, need to be carried out efficiently and on time. Who's responsible for that, how many people will it take, and what are the mechanisms that will allow it to happen for your particular organization?
- What degree of freedom do people at all levels of the organization need in order to do their jobs well? If nothing can get done without going through several layers of management, the organization isn't going to be very effective.
- What are the resources available for carrying out a management plan? How many administrators could the organization support, given its finances? If the answer is one (or one part-time), your management plan will look very different than it would if the answer were three.
- How does the management plan fit in with the mission and philosophy of the organization? It's important, both for the internal workings of the organization and for the way it's viewed in the community, that there be consistency between what the organization says about itself and the way it runs. If an organization claims to be democratic, but keeps its staff totally powerless, it is not only violating its own

principles -- and thereby making it less likely it will accomplish its goals -- but also compromising its reputation

Some common management models

- **Classic hierarchy:** Authority is top-down, typically from the director or board chair. As in the military a textbook example of a hierarchy there is a "chain of command." Everyone knows exactly where he is in that chain, from whom he takes orders, and to whom he can give them. In general, people can act only in a very limited sphere without instructions or express permission from above.



Source: Adapted from Best Practice in Protected Area Management ANZECC Working Group May 2000.

fig.2 Typical planning hierarchy

- **Democratic hierarchy**: Final authority still resides at the top, but managers and administrators at all levels confer with those affected before making decisions. Many non-profits and some corporations operate in this way, with decisions made at the level of those who actually do the work and see the results. This model

generally allows people the authority to oversee their own work, and encourages incentive.

- **Collaborative management**: The whole group -- which usually includes all staff and may include participants as well -- takes part in major decisions, and everyone takes part in decisions which affect her directly. At the same time, everyone has enough authority to fulfill her own responsibility and do her job effectively. The collaborative model allows everyone to feel a sense of ownership in the organization. (A food co-op or other cooperative business often functions in this way, with everyone having a vote in major decisions.)
- **Collective management:** Everyone takes part in all decisions, and the organization is jointly "owned" by the whole collective as a unit. Usually, as a result, consensus (universal agreement) rather than a majority vote, is needed for a decision to be made

Successful management planning will be characterized by these features:

- It is a process, not an event i.e. it does not end with the production of a plan, but continues through its implementation and beyond.
- It is concerned with the future: it identifies concerns and future alternative courses of action, and examines the evolving chains of causes and effects likely to result from current decisions.
- It provides a mechanism for thinking about threats and opportunities and other difficult issues, solving problems and promoting discussion between involved parties.
- It is systematic: most planning exercises work through a pre-determined sequence of steps that give structure to the process and encourage a logical approach. A systematic approach helps to ensure that decisions are based on knowledge and analysis of the subject and its context, and helps others to understand the rationale for proposed actions.
- It also involves value judgements. Management planning can be thought of as a “process which embraces the identification of what a protected area

- It takes a 'holistic' view. The planning process can, if carried out openly and inclusively, take into consideration a very wide range of issues, views and opinions. When applied to a particular area, it should be able to include all processes and issues arising within it, as well as those arising outside its boundaries. How integrated or 'holistic' the process is will depend, however, on how the process is carried out, who is involved and how the final decisions are made.
- It is a continuous process; it is never static; it must adjust to changing conditions and goals

6.1.1 The management planning process

Management planning is a continuous process – a 'circle' with three main elements:

1. Preparation of a Management Plan
2. Implementation of the plan
3. Monitoring and review of the plan

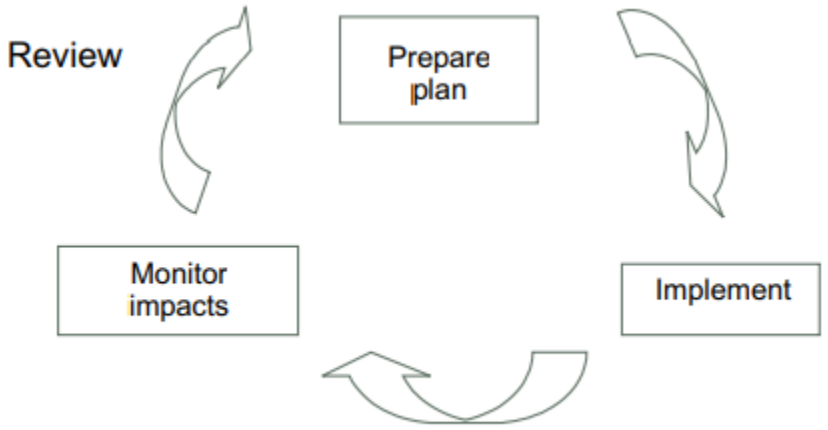


Fig.3. planning process

6.1.2 Preparing a Management Plan

Step 1. Pre-planning phase

The pre-planning phase is one of the most important steps in the planning process. This stage defines what the process will achieve, how it will be carried out, timing

considerations and who is to be involved. These decisions need to be made at the highest possible management level and are critical to starting the planning process on the right footing. This pre-planning phase generally includes the following steps:

1. Clearly identify the purpose and management objectives of the protected area – and ensure that they are understood by all involved. These broad objectives should have been set out in the legislation (or formal agreements designating the area

2. Identify the steps to be followed in applying the planning process, their sequence and the methods to be used. Many organizations have their own 'manual' or guidelines on the approach to be followed, which will have been designed to fulfil the needs and policies of the organization.

3. Determine who are the audiences for the plan. Management Plans are prepared mainly for regular use by protected area managers, but they are not intended as detailed work programs.

4. Ensure that the protected area will be considered as a whole i.e. adopt a 'systems approach'. This recognizes the importance of an analysis of separate issues, but stresses a complete view of all issues or 'systems' that are involved.

5. Use an inter-disciplinary approach – bringing experts and interested parties together to discuss the future management of the protected area.

6. Identify a 'planning team'. Management planning should be a 'team effort'

Step 2. Data collection, background research and initial fieldwork

Planning and management should be informed by reliable data. There are two views about the relationship between data collection and setting management objectives:

1. That, through the collection and analysis of data, management objectives are refined and agreed upon after data is collected and analyzed.

2. Management objectives are set for the area and these determine what data is collected.

Step 3. Evaluating the information

The purpose of this step is to identify and understand why the protected area is important. It helps to describe the 'values' associated with the protected area, explains why it was designated and identifies its benefits to society.

Step 4. Identifying constraints, opportunities and threats

Before defining the specific management objectives for the protected area, the constraints on its management should be identified, as should any major threats to the area's values. Some constraints are a function of the natural environment. Examples are the eco - logical processes which exist in the area, the presence of unique and vulnerable features, the relative rarity of the resource and any other aspects which may be identified.

Step 5. Developing management vision and objectives

A long-term vision - The management planning process should develop and articulate an ideal condition, state or appearance for the future of the protected area. In some plans, this future is defined within goals or aims for the protected area; in others, within 'long-term objectives. In some more recent plans, it has taken the form of a 'vision statement'.

Vision statements describe the desired or envisaged result of the policies for the conservation of the protected area. Without this 'vision', a plan may have little coherent direction. Its purpose is to provide a focus or direction for management objectives. Importantly a vision statement should be aspirational.

Management Plan objectives should be: Precise/specific, Achievable and realistic, Time-related, Measurable, reflect park purpose, significance and exceptional values, spell out the ends desired, but not the means to those ends, adequately address the issues, accompanied by a rationale, Written in priority order.

Step 6. Identifying and evaluating options including zoning

With management objectives in place, the next step is to work out how the objectives will be achieved. As there are often several ways in which this can be done, the range of options for management actions should be identified, and the appropriate ones chosen. Management zones can be used to meet multiple management objectives.

Step 7. Integration into a draft plan

The integration of all of the above planning elements into a single document will result in a draft Management Plan.

Step 8. Public consultation, including public exhibition of the draft plan

The opportunity for the general public and stakeholders to review the draft Management Plan and provide comment is a vital step in the management planning process.

Step 9. Revision of draft and production of final plan

This step in the process involves revision of the draft, taking into account the comments received from stakeholders and the public. Good practice requires that all written comments received, and those noted at public meetings etc., should be recorded and considered. Even if not incorporated into the final version, it would be appropriate for the planning team to summarize each comment received and include these as an annex to the published Management Plan, or to make it a separate document.

Step 10. Approval of plan

This is a procedural step involving submission of the final plan for approval by the competent authority. Procedures will vary from country to country, but in most cases there will be a formal process of adoption or approval to give authority to the plan, often laid down in legislation and clearly documented.

Step 11. Implementation of the Management Plan

The Management Plan sets out actions to be implemented. These should be realistic and necessary for the management of the protected area.

Step 12. Monitoring and review

The purpose of monitoring and review When the Management Plan has been prepared and approved, and the operational plans are in place to guide its implementation, field staff are then able to put the plan into practice. With implementation under way, monitoring and review will provide the feedback loop. The purposes of this step are: to identify whether the plan is being implemented effectively and the objectives are being met; to learn from observation of the impacts of management; and to adapt the management actions accordingly. Where implementation runs into problems, monitoring and review can be used to re-deploy resources and effort to improve implementation.

Step 13. Decision to review and update the Management Plan

The final step in the planning process is to decide on either review or update of the Management Plan. In many cases, the plan will be time-limited by legislation, typically for five, seven or ten years. The decision to undertake a revision needs to be made in sufficient time to allow the new plan to be in place before the expiry of the old one.

Self-check 1	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (10 point)

1. define management plan? (2pts)
2. write the three main management plan planning's (3pts)
3. Write down the characteristics of management planning (3pts)
4. discuss the common management models (2pts)

You can ask you teacher for the copy of the correct answers

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Information Sheet 2- Consultation with stakeholders/clients

Introduction

A stakeholder is anyone with an interest in the business, either having an effect on the business or being affected by it. Typically, stakeholders can be categorized into two groups; internal and external stakeholders. Examples of internal stakeholders are employees, managers and directors. External stakeholders include customers,

suppliers, shareholders and funders. Keeping every stakeholder on-side can be difficult, but can be hugely beneficial.

There is no one right way of undertaking consultation. Given its nature, the process will always be context-specific. This means that techniques, methods, approaches and timetables will need to be tailored for the local situation and the various types of stakeholders being consulted. Ideally, a good consultation process will be

- targeted at those most likely to be affected by the project
- early enough to scope key issues and have an effect on the project decisions to which they relate
- informed as a result of relevant information being disseminated in advance
- meaningful to those consulted because the content is presented in a readily understandable format and the techniques used are culturally appropriate
- two-way so that both sides have the opportunity to exchange views and information, to listen, and to have their issues addressed
- gender-inclusive through awareness that men and women often have differing views and needs
- localized to reflect appropriate timeframes, context, and local languages
- free from manipulation or coercion
- documented to keep track of who has been consulted and the key issues raised
- reported back in a timely way to those consulted, with clarification of next steps
- ongoing as required during the life of the project

2.1. Stakeholder consultation

Stakeholder consultation involves the development of constructive, productive relationships over the long term. It results in a relationship of mutual benefit; it enables us to identify trends and emerging challenges which are currently or will in the future impact on the business. Listening to stakeholder concerns and feedback is a valuable source of information that can be used to improve project design and outcomes, and

help a corporation to identify and control external risks. It can also form the basis for future collaboration and partnerships.

Consultation enables us to identify and monitor trends, challenges and perceptions over time with specific groups of stakeholders. It therefore helps us to:

- Identify and track needs and expectations
- Identify and track perceptions and attitudes
- Provide feedback on specific planned developments
- Evaluate implementations and actions
- Establish the brand values and positioning of the corporation as seen by others

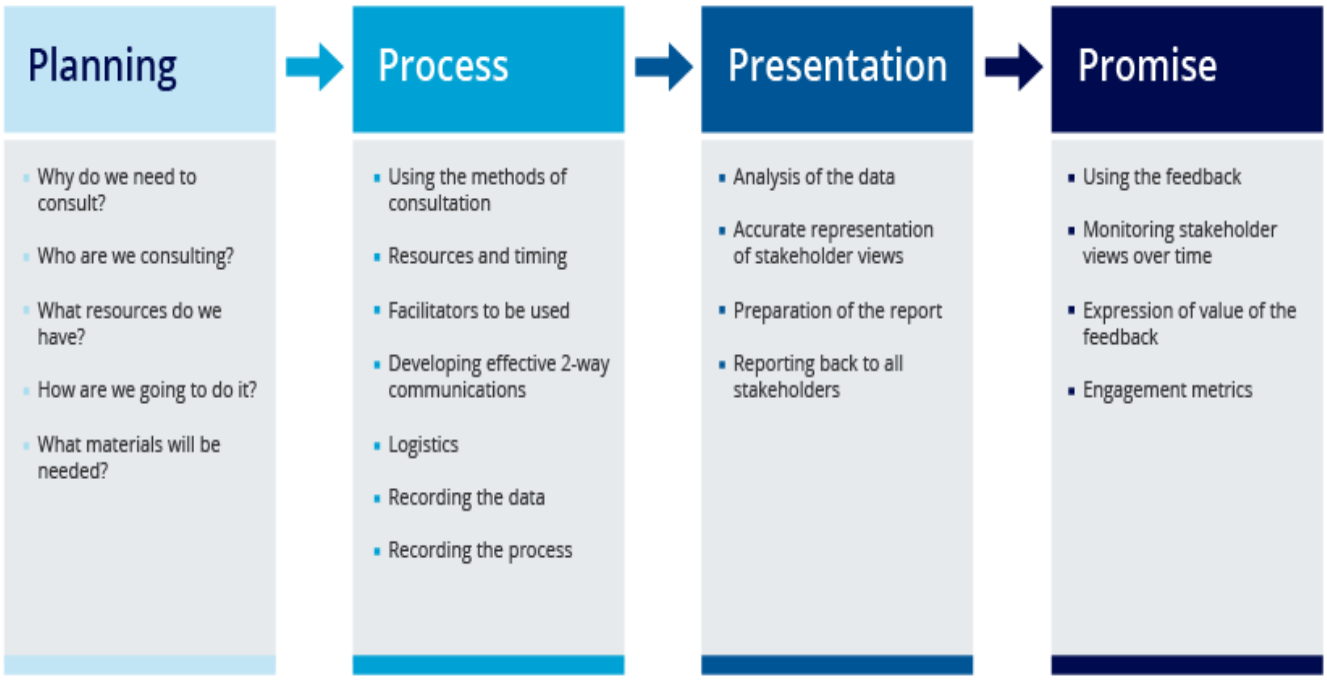
Benefits of Consultation

Whatever the reason for conducting stakeholder research, there are some clear benefits for the organization:

- Firstly, decision making will be more informed and in tune with those who the actions will affect.
- Secondly, there will be greater satisfaction from stakeholders with the outcome. Through the engagement process, those who decisions will affect will feel they have inputted into the final outcome and that everyone's views have been taken into account. Depending on the method of consultation, they will also understand that their perspective may not be shared by all and that there is a need for compromise.
- This in turn will lead to a greater chance of a successful implementation of the initiative. Stakeholders will feel ownership of the venture, and are therefore more likely to want the venture to succeed.

- Finally, consulting with people who will be affected by a development is an example of best practice. It represents good governance and transparency, demonstrates a desire to engage in meaningful two-way communication, and recognizes the important contribution stakeholders at all levels can make to future changes which will directly or indirectly affect them.

Stakeholder consultation process



Self-check 2	**Written test**

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (10 point)

1. what is stakeholder consultation? (2pts)
2. write benefits of stakeholder consultation (3pts)
3. Write down the process of consultation (3pts)

You can ask you teacher for the copy of the correct answers

Note: **Satisfactory rating – 5 points** **Unsatisfactory - below 5 points**

Information Sheet 3- Preparation and presentation of final plan

Introduction

There are many possible ways to present a Management Plan, and many variations in content, sequence and level of detail can be found. The form of the plan will be a function of the budget, the management philosophy, the remit of the management agency and the aims of the Management Plan. But while there is thus no standard format for a Management Plan and no 'right' or 'wrong' approach, the content and structure of a plan should always reflect the needs of the site, the purposes and requirements of its managers and the availability of resources.

The "presentation" stage is where the data gathered is analyzed and reported on. The aims of this stage are to ensure the data is an accurate representation of the stakeholder views, and to prepare the report ready for presentation. The report is typically presented to the process owners, such as the company itself or policy makers. However, feedback will also be provided to those who took part in the process.

Promise

Preparation is the single most important part of making a successful presentation. It is an absolutely crucial foundation, and you should dedicate as much time to it as possible, avoiding short-cuts. Good preparation will ensure that you have thought carefully about the messages that you want (or need) to communicate in your presentation and it will also help boost your confidence.

Organizing your Presentation

A good presentation should be well organized, with a beginning, middle and end.

Beginning:

The beginning of a presentation is very important! This is when you have an opportunity to grab the audience's attention, and set the tone for your presentation.

- Use an attention grabber. Some attention grabbing techniques include: asking a thought-provoking question, showing the audience am intriguing picture, telling a story or use a real life example related to your topic, sharing a shocking statistic related to your topic, sharing a powerful quote, playing a short video

- Introduce yourself and the topic you will be discussing
- Outline what you will be talking about.

Body:

- Discuss your main points in a logical order
- It should be clear to your audience when you are moving from one point to another
- Use examples to support your points

Conclusion:

- Summarize the main points
- Avoid providing new information at this point, but you can state any additional questions that you think your research has led you too
- Use language that lets your audience know that your presentation is coming to an end
- Avoid ending with "that's it!" or apologizing for your presentation
- Thank the audience for listening and invite questions

Self-check 3	Written test

Name…… ID…… Date……

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

Test I: Give short answer (10 point)

1. write down structure of presentation? (2pts)
2. what activity is needed before presentation (3pts)
3. To whom presentation could be held? (3pts)

You can ask you teacher for the copy of the correct answers

Note: **Satisfactory rating – 5 points** **Unsatisfactory - below 5 points**

Operation Sheet 1	Prepare management plan

Objective To prepare management plan for designated area.

Resource needed**:**

- paper
- pane
- topo map

Procedures:

1. Consider degraded land area
2. prioritize key conservation area
3. identify management strategies
4. collect resource required
5. prepare management plan
6. undertake presentation
7. Prepare a report

LAP Test	Practical Demonstration

Name. _____ID _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 4 hours.

Task 1. Prepare management plan

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