

A SHORT GUIDE to Integrating Human Dimensions into MPA Planning and Management

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Introduction

Marine protected areas (MPAs) are increasingly being used as a tool for the achievement of conservation, biodiversity and fisheries management objectives around the world. This is in response to growing concerns about the state of coastal and marine resources and the continuing threats posed by environmental and climate change, industrial and property development, mining activities, recreational pressures, overexploitation of resources, pollution and poverty. However, notwithstanding clear evidence of their important contribution to the protection of marine biodiversity, MPA managers around the world face huge problems and many MPAs are not achieving their objectives.

Human dimensions account for most if not all of the problems facing MPA managers and therefore understanding what those human dimensions are and ensuring that they are addressed at all stages of the MPA planning and management process will improve management effectiveness.

Many MPAs have been established, planned and managed with little consideration of the *human* dimensions and impacts.

What are the human dimensions of MPAs?

Human dimensions include **social, cultural, economic, political and governance issues**, such as human values, aspirations, lifestyles, cultural heritage, livelihoods, local economic activities and institutional arrangements, as well as processes concerned with participation, equity and power dynamics. In particular, very little attention has been given to how MPA planning and management affect communities that depend on local resources and other stakeholders.

These human dimensions need to be considered alongside ecological issues.



Why consider the human dimensions of MPAs?

Increasingly, researchers, conservation planners, managers and communities are recognising that conservation and fisheries management objectives will **not** be realised unless human dimensions and societal concerns are adequately addressed. Failure to do so may undermine the MPA objectives and benefits. However, if planned and managed in a participatory and integrated manner, taking into account the values, rights, needs and concerns of local communities and other stakeholders, MPAs can provide a range of benefits for local communities, local economies, conservation, fisheries and the natural environment.

The Constitution of South Africa requires a balance between ecological sustainability and socio-economic rights and needs. South Africa has committed itself to many conventions, protocols and agreements relating to natural resource management and has promulgated policies and legislation to give effect to those instruments. These laws, while concerned with promoting environmental conservation and management, all require that various social sustainability principles, including **equitable access to resources, sharing benefits from protected areas and active participation of indigenous peoples and local communities** be upheld in planning, management and decision-making processes.



When should the human dimensions of MPAs be considered?

Ideally, the human dimensions should be identified and integrated at every stage of the MPA planning and management process. Whether the conservation authority is planning to establish a new MPA, undertake a strategic review or respond to a particular management challenge that has been identified through a Management Effectiveness Assessment, the integration of the human dimensions perspective will enable a holistic and integrated planning and management process.

What are these Guidelines?

The *Guidelines for Integrating Human Dimensions into MPA Planning and Management* is a comprehensive document based on an extensive review of the literature, best practice guidelines and three years of empirical research on aspects of human dimensions in several MPAs in South Africa.

The AIM of these guidelines is to provide an understanding of the HUMAN dimensions of MPAs, what methods and tools can be employed to understand them and what steps must be followed to incorporate them into MPA planning and management.

There are two guideline documents:

- ❖ A comprehensive guideline document that explains the concept of and components comprising human dimensions, as well as the steps and activities required to identify, assess and integrate human dimensions into the various stages of the MPA planning and management cycle process.
- ❖ A Short Guide (this document) to the above comprehensive guideline document which outlines the 8 key steps and associated activities that need to be considered in the MPA planning and management process.

Both the comprehensive guideline document and the Short Guide are available for download from WWF-SA: www.wwf.org.za



Understanding the range of human dimensions

A range of human dimensions can be identified and grouped according to five main themes – **social, economic, cultural, political and governance** (including institutional) –each of which encompasses a number of more specific human dimensions.

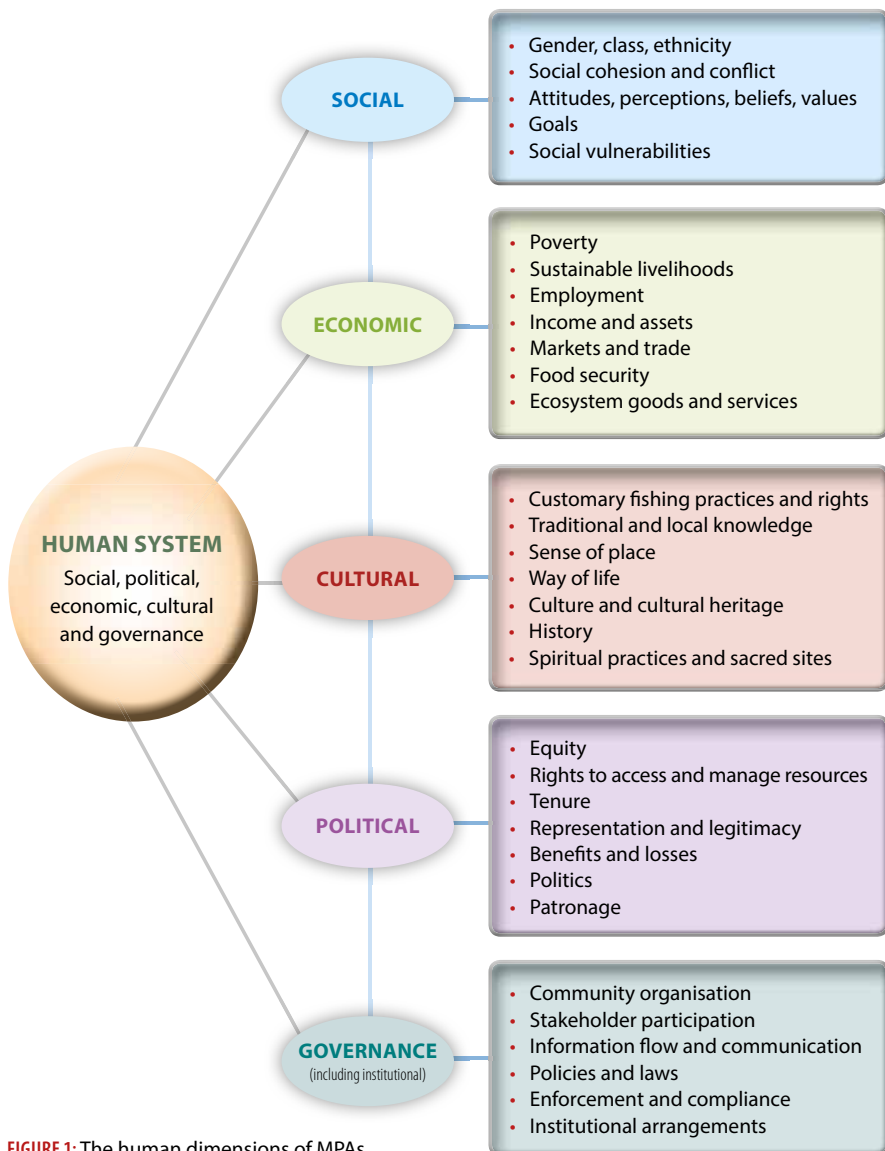


FIGURE 1: The human dimensions of MPAs

The **social dimension** involves consideration of gender, ethnicity, religion, social cohesion, values, attitudes and perceptions of people regarding conservation, as well as their goals and aspirations.

The **economic dimension** focuses on livelihood practices, options and opportunities, as well as issues of poverty, food insecurity, employment, income and assets, livelihoods, access to markets and livelihood development. It also includes consideration of ecosystem goods and services.

The **cultural dimension** is concerned with examining customary fishing practices and rights, including local and indigenous knowledge, which is important in ascertaining whether customary rights are relevant in a particular context. This theme also requires consideration of people's way of life, sense of place, culture and cultural heritage, and of how communities have adapted to management interventions over time.

The **political dimension** is concerned with issues of tenure and land ownership, equity and access rights, representation and legitimacy, how benefits and losses are distributed among stakeholders, and issues of politics and patronage.

The **governance dimension** includes consideration of issues such as community organisation, stakeholder participation, and how information flows and is communicated in a particular MPA context. Consideration of the enabling laws and policies for MPA planning and management, and the institutional arrangements governing MPAs, as well as the nature of enforcement and compliance, are also important issues to take into account.

It is important to note that human dimensions associated with MPAs are often interlinked. For example, the level of poverty in a community may be linked to historic factors (e.g. forced removals, deterioration of agricultural lands), management decisions (e.g. expansion of no-take zone) and current livelihood opportunities. Not all human dimensions will be present in every situation.



Eight key steps for identifying, understanding and integrating human dimensions into MPA planning and management

Below is a summary of the **eight key steps** for integrating the human dimensions into MPA planning and management processes (Figure 2). The second step, engaging stakeholders, is a critical one that shapes the subsequent steps.

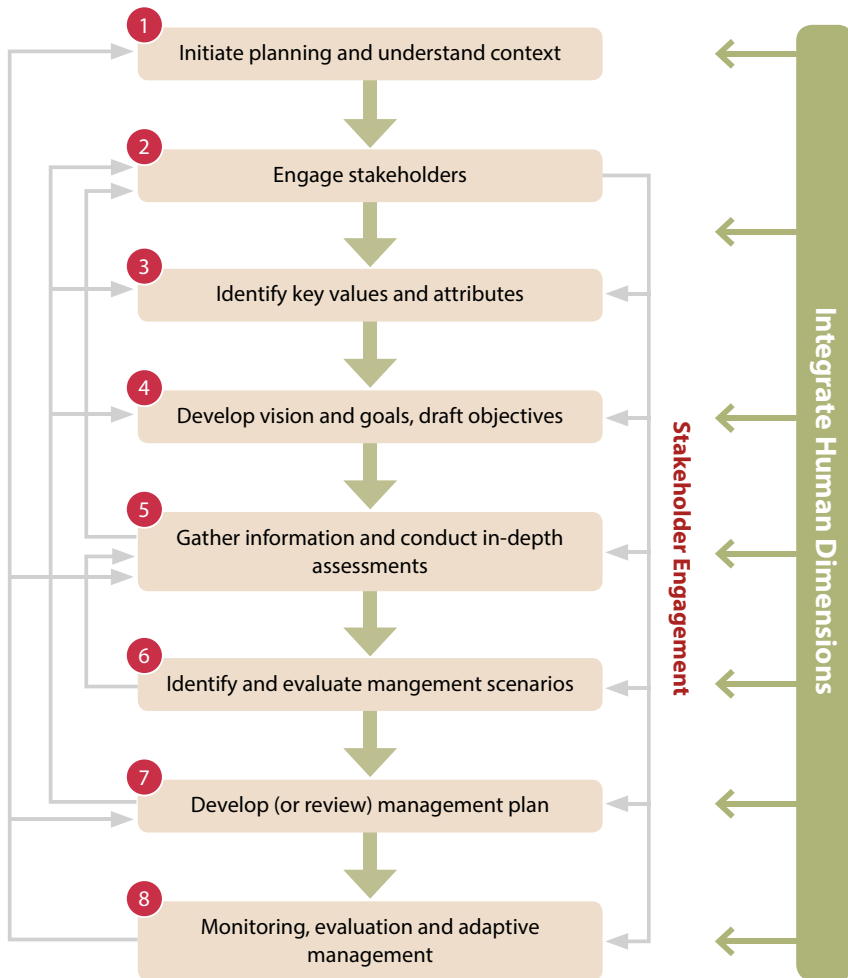


FIGURE 2 Integrating human dimensions into the MPA planning and management cycle process in South Africa

STEP 1 Understand the context: Initiate the planning process

The first step in any planning and management process is to understand the context in which the planning takes place, and to identify the threats and issues that need to shape the planning and management process.

This step includes two important **activities**:

- 1. Understanding the legal, governance and policy context (including institutional arrangements) in which the planning takes place so that the necessary preparation can be done according to prescribed legal and planning requirements.**

The Internal Planning and Management Team ("hereafter Management Team") needs to identify which institutions or structures have decision-making power and authority that will influence the protected area planning and management process. This then enables them to identify the institutions and stakeholders to be invited to participate in the planning process and what powers they have in that process. Furthermore, it will be necessary to source and collate the legal and policy frameworks relating to human dimension requirements of the planning and management process. These will include frameworks that are external, as well as internal, to the conservation authority. For example, there are several international policy frameworks that are relevant to the human dimensions of MPA planning and management. These include:

- The Convention on Biological Diversity (CBD), including the CBD Programme of Work on Protected Areas
- The Convention on Wetlands of International Importance, known as the Ramsar Convention
- The Food and Agriculture Organization Code of Conduct for Responsible Fisheries

Internal management agency documents include agency conservation planning guidelines, guidelines on stakeholder participation and resource use policies.



These instruments provide guidance on **both** the ecological **and** the human dimensions of marine and coastal governance that are relevant to MPAs. Some of these frameworks also provide guidance on the principles and approach to planning and management that should be adopted.

2. Identifying any immediate threats and key issues that will shape the planning process.

The management team needs to consider any immediate threats or risks (e.g. such as a rapidly eroding coastline that poses risks to park infrastructure or illegal recreational activities in the park) that will shape the approach to the planning process. In addition, the team needs to assess if it has the in-house capacity and expertise to undertake any research or assessments required for the planning process, or if they should contract a consultant to do research to provide them with the information required. A facilitator should be identified and a budget secured that makes adequate provision for stakeholder participation in the process.

For more information on Step 1, see page 22 in the comprehensive guidelines.



STEP 2 Engage stakeholders

The engagement of all stakeholders has been identified as the most important aspect of MPA planning, establishment and management.

Stakeholders are individuals or groups that may have a direct or indirect interest, or stake, in a marine resource and/or area and its management, or may be affected by decisions regarding its current and future use and management. They might have direct interests or rights in the area, (e.g. fisheries right holders, local communities dependent on resources) or have indirect interests (e.g. recreational users, NGOs, researchers).



Stakeholder engagement is a critical step in integrating the human dimensions into MPA planning and management. The key objective is to secure appropriate, legitimate, and effective participation by recognised rights holders and stakeholders in the MPA planning and management process.

The key **activities** within this step include:

1. **Clarifying the approach to stakeholder participation, including how representatives will be selected, their roles and responsibilities**
2. **Identifying the stakeholders**
3. **Understanding stakeholder power and status**
4. **Ensuring the full and effective participation of all stakeholders throughout the MPA planning and management cycle process**

It is recommended that a **Joint Planning Team** be established that comprises conservation agency representatives as well as representatives from stakeholder groups. This team will be able to report back to stakeholder groups and the public in general at key stages in the process.

For more information on Step 2, see page 26 in the comprehensive guidelines.

STEP 3 Identify the key values and attributes of the area

Once the stakeholders have been engaged and the Joint Planning Team has clarified its own methodology for proceeding with the planning, the team moves towards the important step of developing a shared vision and desired state for the area under consideration. Before doing that, however, it is necessary to identify the attributes of the area and understand the value and significance that different stakeholders attach to the various ecosystems goods and services provided by the socio-ecological system, as well as the threats and risks that these face.

A key aim of this step is to explore how society in general, and the Joint Planning Team in particular, value different aspects of the socio-ecological system and perceive which aspects might require protection. The key **activities** involved in this step include:

1. **Identifying the key attributes of the system**
2. **Assessing the values and significance attached to the key attributes**
3. **Identifying and assessing issues of concern, threats, risks and management challenges facing the area**

Before the Joint Planning Team gets down to discussing in detail the value of different components (called “attributes”) of the area, a process of gathering information about the human and ecological dimensions is necessary. This ensures that a broad range of dimensions is covered, and not just the ecological components.

Vital attributes are the most important characteristics (biodiversity, heritage, geographic, touristic, etc.) of the system to be managed – which make the system unique and which are valued by various stakeholders (SANParks, 2006).

It is critical for this process of information gathering to include a wide range of stakeholders and draw on diverse sets of knowledges (or ways of knowing) and information. A rapid rural appraisal, which involves on-site visits and discussions with representatives of the conservation authorities, local communities, relevant authorities, researchers and other stakeholders, is an important process that will help the team understand diverse values, interests, needs and perspectives and develop relationships among key stakeholders.

The guidelines offer a range of methods and tools to assist the joint planning team in gaining a sound understanding of the values, dynamics and attributes of an area.

Once the list of key attributes has been made and there is common understanding about the values and significance attached to these attributes, the group needs to explore the key threats and risks that face the attributes and why they might need protection. This will help the group identify the type and degree of protection that might be needed. It is part of the process of understanding the management challenges that the area or MPA faces.

A number of different methodologies and tools are available for identifying and rating threats and risks. Examples of these are presented in the guidelines.

For more information on Step 3, see page 34 in the comprehensive guidelines.



STEP 4 Develop the vision, goals and draft objectives

The **key objective of this step** is to jointly develop a vision, agree on the goals and draft a set of objectives for the area.

This step draws on the activities undertaken in each of the earlier steps. Understanding of the legal and policy framework, the key attributes of the area and the values attached to these attributes enables the joint planning team to develop a shared vision and objectives.

The specific **activities** involved in this step include:

1. **Developing a common vision**
2. **Identifying goals**
3. **Setting draft objectives**

A range of workshop tools are presented in the full guidelines to help the joint planning team reach consensus on these issues.

It is important to develop a common vision at the beginning of the planning process, as the vision will provide invaluable “common ground” on which to develop goals. Agreeing on a vision will also help to solve problems when management agreements are being negotiated later in the process, as the vision will lay the foundation for a shared understanding of the social and ecological needs. Note that careful implementation of Step 2 (engaging stakeholders) will ensure that all relevant stakeholders are present and equipped to take part in this exercise.

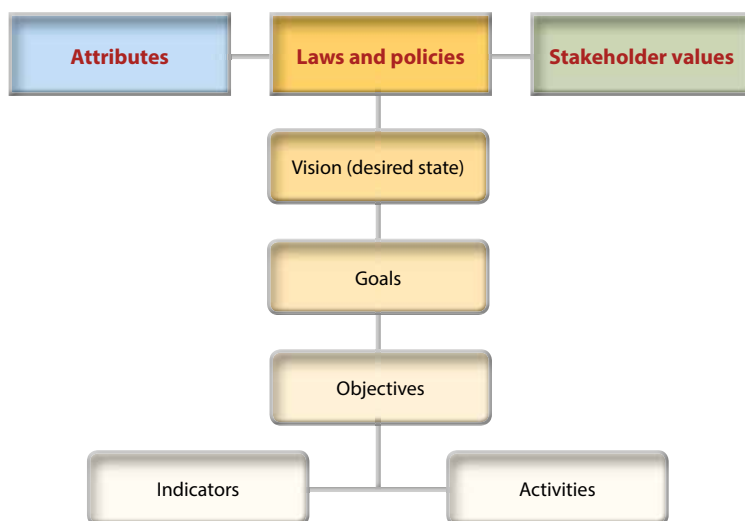


FIGURE 3: Organogram of process to develop vision, objectives, goals

For more information on Step 4, see page 45 in the comprehensive guidelines.

STEP 5 Gather further information and conduct in-depth assessments

Once a draft vision, goals and objectives for the MPA have been identified, the Joint Planning Team has to obtain any further information needed to select appropriate management strategies and actions. The **key objective of this step is to gather further information on human dimensions, and to conduct in-depth assessments of issues and impacts associated with the establishment or expansion of an MPA or a particular management intervention and/or decision in the case of an existing MPA.**

Key **activities** to be undertaken in this step include:

1. **Identifying key knowledge gaps that require further investigation**
2. **Deciding who should conduct the in-depth assessments**
3. **Identifying the methods and tools to conduct in-depth assessments**
4. **Assessing key issues and impacts of the proposed or existing MPA or specific management intervention**



At this stage the Joint Planning Team needs to draw on people with diverse expertise and experience to assist them in obtaining and assessing appropriate information. Many tools exist for obtaining additional information of relevance to the planning process at this stage. These include economic impact assessments, social impact assessments and cost-benefit analyses: tools that combine quantitative and qualitative data. It is critical that the information tool selected matches both the ecological and the social needs of the MPA site, and captures the social and ecological complexity of the particular ecosystem.

At the end of Step 5, the Joint Planning Team should have a sound information base on both the ecological and human dimensions, as well as an overview of the potential impacts that could emanate from MPA-related activities and interventions.

For more information on step 5, see page 52 in the comprehensive guidelines.

STEP 6 Identify and evaluate different management scenarios

Once the information has been gathered and analysed and the key issues and impacts assessed, these findings must be presented to and discussed among all the stakeholders. The key objective of this step is to identify and evaluate the most appropriate management scenarios and activities for the MPA.

This step involves the following **activities**:

- 1. Facilitating discussions that will enable MPA planners, managers and stakeholders to consider all the information together, evaluate issues and impacts, and reflect on key attributes, vision, goals and objectives set earlier in the process**
- 2. Preparing different management options that can be discussed and negotiated with the various stakeholders**



The knowledge gathered on a broad range of human dimensions, as well as issues and potential impacts, will help MPA managers and conservation authorities identify potential risks, and also the benefits and losses associated with different management options. The Joint Planning Team will then be in a position to make critical decisions about the potential impacts of various management scenarios on different stakeholder groups and to weigh up the most appropriate management intervention.

For more information on Step 6, see page 62 in the comprehensive guidelines.

STEP 7 Develop or review the management plan

The **objective** of this step is to develop an agreed plan that will guide the management of the proposed or existing MPA.

Once an assessment of the various management options has been finalised and consensus reached, the goals, objectives, indicators, strategies and key activities need to be settled on and documented in a management plan.

A typical management plan will include:

1. Purpose of the plan
2. Vision, goals and objectives of the MPA
3. Management standards, i.e. the indicators for each objective
4. Management strategies and activities
5. Control rules
6. Resources to implement the plan
7. Implementation and action plan
8. Monitoring protocol
9. Reviewing schedule
10. Appendices (stakeholder contact list, knowledge base, etc.)



A core element of the management plan is the selection of appropriate strategies and associated activities to ensure that the goals and objectives are being met. In addition, clear indicators that can be used to set a baseline and then measure progress towards the achievement of the objectives must be identified. Some examples of socio-economic indicators are:

- ❖ Local marine resource use patterns
- ❖ Local values and beliefs about marine resources
- ❖ Household characteristics and assets of affected communities
- ❖ Household income and distribution.

(adapted from Pomeroy et al., 2004)

In most instances, a management plan already exists and will therefore need to be reviewed. In a process of review, systematically implementing the activities listed in Steps 1–7 will ensure that human dimensions are integrated into each stage of a review process, thereby enabling the management plan to be revised and updated accordingly.

For more information on Step 7, see page 67 in the comprehensive guidelines.

STEP 8 Monitoring, evaluation and adaptive management

Achieving MPA objectives requires that well-defined management plans be developed, measures of MPA progress and success defined, impacts of management actions monitored and evaluated, and the results of these activities fed back into the planning process to revise objectives, plans and outcomes. In other words, MPAs need to be adaptively managed. It is only by deliberately integrating monitoring and evaluation into the overall MPA planning and management process that the benefits of adaptive management can be fully realised.

The key **objective** of this step is to develop a comprehensive monitoring and evaluation programme.

Key activities in this step will be to set up a participatory monitoring programme as well as to plan for periodic evaluation and review.

Ecological **and** human dimensions of the MPA should be monitored and evaluated, as well as the management process itself.

Monitoring activities can be undertaken by MPA managers and conservation authorities, researchers and/or other stakeholders. In some cases, **participatory research** is undertaken in which different stakeholder groups work together to collect and analyse data. Simple and robust indicators are essential for monitoring.

Indicators are used to monitor goals and objectives and to check whether the MPA has not only achieved its conservation objectives (such as the reversal of biomass and biodiversity loss), but also resulted in an improvement in the living conditions or socio-economic circumstances of the communities concerned and other stakeholders. In this respect, the collection of biological and socio-economic baseline data before the setting up of the MPA is indispensable to compiling a good comparative set of information (see Step 6).

The results of any evaluation will be used to adapt management strategies, and in some cases may call for a revision of the MPA objectives, or even a re-think of management strategies and tools.

For more information on Step 8, see page 68 in the comprehensive guidelines.

What is in the guidelines **TOOLBOX** of resources?

In addition to providing detail on each of the eight steps outlined above, the guidelines contain a set of factsheets on each key human dimension, in order to give fuller context and more in-depth information, as well as case studies from South Africa and around the world that serve as examples of best practice. A set of references listing useful resources and other toolkits and guidelines is also included.

For a copy of the guidelines or additional information contact: www.wwf.org.za.





Conservation planners, MPA managers, researchers and local communities are calling for a more people-centred approach to MPA planning and management, recognising that conservation and fisheries management objectives will *not* be realised unless human dimensions and societal concerns are adequately addressed. This guideline document aims to provide guidance on how **human** dimensions can be understood and integrated into MPA planning and management processes.



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