

1 West Indian Ocean Workbook

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1.1 Organisation/Affiliation

IUCN Eastern African Regional Office

1.2 Primary reference

Wells, S. and S. Mangubhai (2005) A Workbook for Assessing Management Effectiveness of Marine Protected Areas in the Western Indian Ocean. IUCN Eastern African Regional Programme, Nairobi, Kenya.

Wells, S. and Mangubhai, S. (2005) Manuel d'évaluation de l'efficacité de la gestion des aires marines protégées dans l'océan Indien occidental. Édition française réalisée par la Commission de l'Océan Indien (ProGeCo).

1.3 Purposes

- ✓ to improve management (adaptive management)
- ✓ to raise awareness and support for effective management

1.4 Brief description of methodology

The workbook follows the IUCN-WCPA Management Assessment Framework closely; the methodology has been adapted from that developed through the UN Foundation/UNESCO/IUCN-WCPA project *Enhancing our Heritage*. It uses worksheets to assess each of the six elements of good management (context, planning, inputs, processes, outputs and outcomes) and explains how these can be adapted to the particular needs of individual MPAs.

A small 'implementation team', comprising MPA personnel, key stakeholders and sometimes consultants, leads the assessment and ensures that data are collected and worksheets compiled. Staff and stakeholders review the worksheets in consultative workshops, and a report and recommendations are produced. The assessments can be carried out over a relatively short period of time (e.g. 3-4 months) and should therefore complement (rather than be an alternative to) the more detailed method developed by WCPA-Marine which focuses on identifying and using indicators to assess outputs and outcomes (Pomeroy *et al.*, 2004).

1.5 Objectives and application

The main objective of the workbook is to provide a simple easy-to-use tool for managers to evaluate the management effectiveness of their MPAs and adapt their management accordingly. It results in a more detailed assessment than is obtained by using a score card, is less detailed than the *Enhancing our Heritage* approach used for World Heritage Sites, and it is more general than the WCPA-Marine methodology.

It has been tested in eight MPAs in three countries in the WIO – Kenya (Kisite/Mpunguti, Mombasa, Malindi, and Watamu Marine National Parks and Reserves, and Kiunga Marine National Reserve), Tanzania (Mafia Island and Mnazi Bay-Ruvuma Estuary Marine Parks) and Seychelles (Cousin Island Special Reserve) (Wells, 2004). It has subsequently been used for further assessment work in Kenya (Muthiga, 2006). There are plans to use it in some of the French speaking islands in the Western Indian Ocean, and some of the concepts are being incorporated into MPA management effectiveness assessments being undertaken in South-East Asia.

1.6 System origins

The West Indian Ocean Biodiversity Conservation Project initiated in February 2000 was a partnership project to assist the Contracting Parties to the Nairobi Convention to implement the Jakarta Mandate of the Convention of Biodiversity (CBD). The production of the workbook addressed the third result area of the project: "establishment and management of marine protected areas". The 'workbook' was produced in order to test and adapt the WCPA methodologies for use at MPAs in the Western Indian Ocean (WIO).

1.7 Strengths

The methodology covers all elements of the IUCN-WCPA Framework but allows flexibility to develop specific indicators relevant to the site being evaluated. The process itself has many benefits, including a more clear definition of management objectives, key values and management standards.

In the pilot assessments, all involved found a benefit in the process. It helped MPA staff to think about the reasons behind the establishment of the site, how their management activities can have an impact on both biodiversity and stakeholders, how even small insignificant management issues can affect the overall success of an MPA, and it encouraged them to look more carefully at their management plans. All six components of the methodology were considered useful, and all sites felt that the results of the assessments should be incorporated into the review and revision process for management plans. Most sites reported that the assessments were particularly valuable in terms of improving relationships with stakeholders and, in all cases, the stakeholders expressed great appreciation of the exercise (Wells, 2004).

1.8 Primary constraints and weaknesses

Assistance is needed for the evaluation teams to work out the indicators and methodologies. It was considered that the process is too complicated for some situations.

The process of self-assessment was challenging and sensitive in some situations, especially in government institutions. Lack of support by senior government officials was a constraint to the project.

1.9 How the methodology is implemented

This methodology uses 'worksheets' to guide the assessment of each component. It encourages basic standards for assessment and reporting, and suggests issues to be measured, and some ideas for indicators. Thus, like the IUCN-WCPA Framework, it provides a common structure and 'language' but allows sites to develop their own indicators or criteria. The scale and detail of an assessment will vary, depending on financial and human resources available and the particular needs of an MPA. It may not be necessary to monitor all aspects of the environment and management process to determine how effectively an MPA is being managed but an attempt should be made to address all components.

For the pilot assessments, each site was provided with a small sum to cover some of the costs, such as meetings or hiring additional assistance. The MPAs themselves were expected to provide in-kind support (e.g. staff time, use of vehicles), and financial input where possible, particularly since the aim was to make assessments a regular part of the management cycle. The assessment started with an introductory workshop for the eight sites, organised and facilitated by IUCN-EARO, at which the methodology was explained.

An implementation team was formed for each site. Teams varied in composition, although all teams comprised predominantly MPA staff. At Watamu Marine Park and Reserve, however,

the team included representatives from non-governmental and community based organisations, as well as a Japanese volunteer; at Kisite the team included one of the key village elders. In Kenya, a national co-ordinating team was also established because of the large number of sites, comprising staff from the Kenya Wildlife Service Coast office in Mombasa, to provide technical and logistical assistance.

The implementation teams drew up a work plan for the assessment and compiled the worksheets with assistance from the national co-ordinators and technical support from IUCN-EARO. All sites followed the same general approach, but made minor modifications according to their needs. Some of the MPAs developed a questionnaire that was used to collect information and opinions in a workshop setting, as the worksheets were found to be too complex for some of the community stakeholders (e.g. fishermen and boat operators). The completed sheets were reviewed by stakeholders at workshops, informal meetings or through correspondence.' (Wells, 2006). The process outlined in the workbook is shown below (Wells and Mangubhai, 2004).

Determine level of assessment - This will vary between sites depending on human and financial resources available, and the specific needs of the site. At least some level of assessment should be undertaken on outcomes.

Develop Terms of Reference (TOR) for the assessment - These should clearly state who will be involved, timeline for the

1.10 Elements and indicators

The workbook assists in the process of developing details indicators and scoring. In general, these indicators address the following headings.

Assessment component	Worksheets
Context	Management Targets Threats (Sources and Stresses) Review of National Context Assessment of Stakeholder Engagement Stakeholder Engagement Summary
Planning	List of Planning Documents Adequacy of Management Plan (and other plans if relevant) Design Assessment x
Inputs	Assessment of Resources (Inputs) Resources (Inputs) Summary Assessment of Resources (Inputs) Assessment of Capacity
Process	Assessment of Management Processes Assessment of Capacity
Outputs	Assessment of Management Plan Implementation Management Plan Implementation Summary
Outcomes	Assessment of Biodiversity Objectives Assessment of Socio-economic and Cultural Objectives Ranking of Current Threats Current Threat-Target Summary

1.11 Scoring and analysis

A combination of qualitative and quantitative indicators is recommended, and the workbook focuses on guiding assessors to produce useful information that can be fed into the adaptive management process.

Recommendations for reporting include.

1. Brief description of main characteristics of the MPA
2. Methods used – how the assessment was carried out
 - who was on the implementation team (names, positions, organisations),
 - what was each person's role and responsibilities in the assessment;
 - what meetings were held – when, where, who attended, what was discussed and what resulted.
 - how was the information gathered; list of sources (N.B. sites should keep a record of their sources of data and references)
3. Results achieved
 - Worksheets
 - Text summary of main results of the assessment and conclusions
4. Review of assessment process – identifying any constraints or obstacles
5. General conclusions and summary of recommendations

In addition, suggestions are made to assist in implementing the recommendations.

References

Muthiga, N.A. (2006). Assessing the effectiveness of management of marine protected areas in Kenya: experiences from the Mombasa Marine Park and Reserve. Proc. 10th International Coral Reef Symposium, Okinawa, 2006.

Pomeroy R., Parks J. and Watson L. (2004) 'How is your MPA doing? A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Area Management Effectiveness.' (IUCN, WWF, Gland and the US National Oceanic and Atmospheric Administration (NOAA): Gland and Cambridge).

Wells S. and Mangubhai S. (2004) A Workbook for Assessing Management Effectiveness of Marine Protected Areas in the Western Indian Ocean. IUCN Eastern African Regional Programme., Nairobi, Kenya.

Wells, S. 2004. Assessment of Management Effectiveness in Selected Marine Protected Areas in the Western Indian Ocean. IUCN Eastern Africa Regional Programme, Nairobi, Kenya, viii + 26 pp.

Wells S. (2006) Case Study I: Evaluation of marine protected areas in the Western Indian Ocean. In 'Evaluating effectiveness: a framework for assessing the management of protected areas second edition'. (Eds Hockings M., Stolton S., Dudley N., Leverington F. and Courrau J.). (IUCN Best Practice Protected Area Guidelines Series: Gland, Switzerland and Cambridge, UK).

Wells, S. (2006). Assessing the effectiveness of marine protected areas as a tool for improving coral reef management. In: Côté, I. and Reynolds, J. (eds.): *Coral Reef Conservation*. Cambridge University Press