The WCPA Management effectiveness framework – where to from here?

Marc Hockings, Nigel Dudley and Sue Stolton

Summary: the emergence of new challenges and opportunities is forcing a fundamental reassessment of protected area management. To maximise the potential of protected areas we need to understand strengths and weaknesses in their management. A WCPA Task Force is developing a framework for assessing management effectiveness of protected areas and protected area systems. The draft framework is presented and some recent modifications are highlighted, including greater emphasis on context (such as significance of and threats to protected areas) and ways of reporting results. We also present some challenges for the future including: (i) using the tools as a contribution to improving protected areas through field projects; (ii) training in the techniques used to carry out assessment (iii) promotion to governments, development agencies and PA agencies; (iv) development of criteria and indicators for marine protected areas; (v) policy development including assessing future options including the possible use of assessment in verification or certification systems; and (vi) development of key institutional partners.

Throughout the world, the emergence of new challenges and opportunities are forcing a fundamental reassessment of protected area management. Putting time and effort into the selection and designation of protected areas only makes sense if there is a reasonable chance that the areas can be secured for the foreseeable future. Unfortunately, this is often not the case today. There is a growing recognition that many protected areas are being degraded and destroyed. Degradation comes in many forms, including poaching (of wildlife, fish, timber and other resources), illegal mining, encroachment by settlers, over-use by tourists and the development of infrastructure such as roads and dams. Sometimes local opposition to protected areas contributes to their loss. Even when protected areas are free from immediate threats, longer term changes brought about through air and water pollution and global climate change are affecting areas that have been set aside for their important ecological characteristics.

The seriousness of the challenges facing protected areas has forced a fundamental rethink about protected area design and management. One important element in this is the recognition of the need for far better knowledge about the status and management effectiveness of protected areas. Indeed, it is remarkable to realise how little we know about the status of many of protected areas – far less than we usually know, for example, about the health of agricultural land or the viability of fish stocks. This is more than just of academic interest. What little we do know suggests that many protected areas are not in particularly good shape, suffering from a variety of threats and in some cases in danger of losing the very values for which they were set aside in the first place. Others exist in name only – the so-called “paper parks” that exist as lines on the map but have never actually been implemented. There is therefore clearly a need for better systems for assessing the management effectiveness of protected areas, to provide information for managers themselves, for NGOs, governments, donor agencies and civil society.

The World Commission on Protected Areas set up a Management Effectiveness Task Force to look into these issues and prepare proposals for how protected area management might be better assessed. This paper draws together the results of five years effort by specialists around the world. It is based on initial work carried out at the World Conservation Monitoring Centre in Cambridge, UK, and on a series of workshops and meetings held in association with IUCN, WWF, the World Bank and the World Heritage Convention in the UK, Costa Rica and Australia. We have also been able to draw upon research and expertise built up by members of the Task Force and others who have developed assessment systems in Central America, Brazil, Peru, Australia, Cameroon, Gabon, India, and with bodies such as WWF and the World Bank.
The proposed framework

The framework developed in 1997 has now been revised to incorporate lessons learnt through the workshops and case studies. We recognise that different situations and needs require different levels of assessment, different approaches and different emphasis. The following framework is therefore not a straitjacket, but an overview that helps in the design of systems, provides a checklist of issues that need to be measured and suggests some useful indicators.

The process of management starts with establishing a vision, planning and allocation of resources and, through management actions, produces goods and services. The type of management used is influenced by issues such as the biological and cultural significance of the protected area and the threats that it faces. Monitoring and evaluation provide the link that enables planners and managers to learn from experience and helps governments, funding agencies and civil society to monitor the effectiveness of protected area networks. Assessment should ideally look at all aspects of the management cycle, including the context within which management takes place. It requires both monitoring and evaluation at various stages, each with a different type and focus of the assessment. Figure 1 presents a common framework within which evaluation and monitoring programmes can be established, combining context, planning, input, processes, outputs and outcomes.

![The Management Cycle Diagram](image-url)
The elements to be measured
The following section provides a brief description of each of these elements and explains why they are important.

Design issues relating to both individual sites and to protected area systems
Context - Where are we now? The protected area’s current status and importance and the threats and opportunities that are affecting it; this is not an analysis of management, but provides information that helps put management decisions into context. Where assessment is being used to identify management priorities within a protected area network this may be the main part of the assessment required. It also helps to provide information about management focus.

Planning - Where do we want to be? The appropriateness of national protected area policies, plans for protected area systems, the design of individual protected areas and plans for their management. The indicators chosen here will depend on the purpose of assessment and particularly whether it is looking at a system of reserves or an individual protected area. In the former case, issues of ecological representativeness and connectivity will be particularly important while the focus of assessment of individual protected areas will include shape, size, location and detailed management plans.

Appropriateness of management systems and processes
Input and process – what do we need and how do we go about it? The adequacy of resources and the standards of management systems, based on data about resources and management processes. Inputs generally include a measure of staff, funds, equipment, facilities required at either agency or site level. The adequacy of management processes can be assessed through issues such as day-to-day maintenance through to the adequacy of approaches to local communities.

Delivery of protected area objectives
Output and outcome – what were the results and what did we achieve. Whether management has reached the targets and objectives established through a management plan, national plans and ultimately the aims of the IUCN category of the protected area. Output evaluation considers what has been done by management and examines the extent to which specific targets, work programmes or plans have been implemented. Approaches to outcome evaluation involve long-term monitoring of the condition of the biological and cultural resources of the site/system, socio-economic aspects of use and impacts of the site/system’s management on local communities. To some extent measurement of outputs focuses on the quantity of management achievements while outcomes focus on the quality of management in terms of the overall objectives.

Evaluating management effectiveness
Ideally, systems for assessing management effectiveness of protected areas will incorporate components that cover each of the elements of evaluation outlined above. Because each type of evaluation has a different focus, they are complementary rather than alternative approaches to evaluating management effectiveness. Time series data for both inputs and outputs within a protected area or system can be particularly valuable in assessing changes in the efficiency of management and may enable a judgement to be made about the effectiveness of a change in the processes used in carrying out a particular activity. However, assessments will be driven by particular needs and that a partial evaluation can still provide very useful information.

In Table 1, the framework is summarised in table form.
Table 1
Framework for assessing management effectiveness of protected areas and protected area systems

<table>
<thead>
<tr>
<th>Elements of evaluation</th>
<th>Context</th>
<th>Planning</th>
<th>Input</th>
<th>Process</th>
<th>Output</th>
<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td><strong>Explanation</strong></td>
<td>Where are we now?</td>
<td>Where do we want to be?</td>
<td>What do we need?</td>
<td>How do we go about it?</td>
<td>What were the results?</td>
<td>What did we achieve?</td>
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<tr>
<td></td>
<td>Assessment of importance, threats and policy environment</td>
<td>Assessment of PA design and planning</td>
<td>Assessment of resources needed to carry out management</td>
<td>Assessment of way in which management is conducted.</td>
<td>An assessment of the quantity of achievements</td>
<td>An assessment of the quality of achievements</td>
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<tr>
<td><strong>Criteria that are assessed</strong></td>
<td>Significance</td>
<td>Protected area legislation and policy</td>
<td>Resourcing of agency</td>
<td>Suitability of management processes</td>
<td>Results of management actions</td>
<td>Impacts: effects of management in relation to objectives</td>
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<tr>
<td></td>
<td>Threats</td>
<td>Protected area system design</td>
<td>Resourcing of site Partners</td>
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<td>Services and products</td>
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<td></td>
<td>Vulnerability</td>
<td>Reserve design</td>
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<td>National policy</td>
<td>Management planning</td>
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<td><strong>Focus of evaluation</strong></td>
<td>Status</td>
<td>Appropriateness</td>
<td>Economy</td>
<td>Efficiency</td>
<td>Effectiveness</td>
<td>Effectiveness Appropriateness</td>
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Recent developments in the proposed framework
Since the framework was first proposed, greater emphasis has been placed on the importance of providing information about the context of protected areas (how important they are and why, and their current status) and on the threats they face. These elements help particularly when assessment is being used on a system-wide approach or to decide where best to allocate limited resources – a common challenge for virtually all protected area agencies and managers.

What level of assessment is needed?
The framework can be applied at different levels depending on circumstances, resources and needs. Three broad levels of monitoring and evaluation are proposed (Figure 2). Deciding on how much time and effort to spend is the first stage in any assessment and the detailed framework contains a methodology for helping planners and managers to make this decision.

- Level 1 requires little or no additional data collection but uses available data to assess the context of the protected area network or individual site along with the appropriateness of planning, inputs, processes of management. It may include limited assessment of outputs.

- Level 2 combines the approach taken in Level 1 with restricted additional monitoring of outputs and outcomes of management.

- Level 3 emphasises monitoring the extent of achievement of management objectives through focussing on outputs and outcomes while retaining measures of management context, planning, inputs and processes. Level 3 assessments are directed mainly at site level.

<table>
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<tr>
<th>Level</th>
<th>Context</th>
<th>Planning</th>
<th>Inputs</th>
<th>Processes</th>
<th>Outputs</th>
<th>Outcomes</th>
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<td>Level 1</td>
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<td>Level 2</td>
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<td>Level 3</td>
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Figure 2: Levels of monitoring and evaluation
A project’s objectives will often determine the level at which the framework is applied. For example, an NGO reviewing a national protected area system for advocacy purposes is more likely to use a level 1 assessment, whereas protected area authorities trying to establish the effectiveness of individual sites would usually be better served by a level 3 assessment.

This framework is still a draft. It is intended to publish a final document in time for the World Conservation Congress in Amman Jordan in October 2000. We welcome further comments but need to receive these by 19th May, 2000.
Into the future

The Task Force is well advanced towards completing the framework. This is not an academic exercise. Whether or not the framework is worth the effort put into it will depend entirely on whether it is useful – and it is used – to improve management on the ground. In the final part of this paper we therefore offer some preliminary thoughts about priorities for the next two to three years – which in turn lead into some of the issues being discussed in the workshops.

Priority 1: Using the tools – implementation of management effectiveness assessment as a contribution to improving protected areas through field projects. It is proposed that the Task Force work with existing projects – including the periodic reporting of World Heritage Sites and projects associated with the WWF/World Bank Alliance target on management effectiveness – to use assessment at a variety of levels as part of a wider process of improving management. We aim to be able to present a detailed report on lessons learned at the 2002 World Parks Congress and to continue this development through the lifetime of the Alliance target and beyond.

Priority 2: Training – about both the importance of assessing management effectiveness and the techniques used to carry out assessment. At the moment, only a few enthusiasts or specialists understand assessment systems; there is an urgent need to communicate skills and expertise. It is proposed that the Task Force work with existing institutions to train trainers during 2001 and 2002, drawing on experience in Central America where a similar exercise has already been undertaken by the IUCN/WWF Forest Innovations project. This will include running a trainers’ workshop in one region, hopefully in association with GTZ, the Wildlife Training College and others. The development of teaching modules will be an important part of this focus and will also enable information to spread out to other training institutions. It is aimed to have a global network of professionals trained in use of assessment methods by 2002.

Promotion – spreading the word to governments, development agencies and PA agencies. At the same time, the message about both the importance of management effectiveness in protected areas, and approaches to its assessment, need to be disseminated amongst those most likely to make used of the knowledge. The publication of the Best Practice Guidelines document as part of the IUCN/Cardiff University series is a major step in this direction. It is also proposed to use existing initiatives to promote assessment (e.g. the Intergovernmental Forum on Forests and the Convention on Biological Diversity) and to run workshops aimed specifically at major governmental and NGO development agencies. Our aim is to have key governments and development agencies adopt assessment systems by the time of the 2002 World Parks Congress.

Technical development – development of criteria and indicators for marine protected areas. Although good progress has been made in terrestrial protected areas, there is still an urgent need for development and testing of assessment systems in marine areas. It is proposed that the Task Force collaborate with others, including the marine programmes at WWF and IUCN, and partners such as the Great Barrier Reef Marine Authority and the National Ocean and Aeronautical Administration to develop assessment systems.

Policy development – assessing future options including the possible use of assessment in verification or certification systems. It is clear that there is interest in developing assessment systems suitable for standard setting or certification – for example the Pan Parks initiative currently taking place in Europe. This is a more controversial development; the Task Force intends to work with WWF and others to examine options for using assessment within verification and certification schemes, through a small working group and to bring proposals to the 2002 World Parks Congress.

Key institutional partners – these issues are too large for one organisation to work on alone, and we have emphasised the importance of partnerships throughout this paper. One important aim for the next few years is to develop good working relationships with existing partners, such as IUCN, WWF, The World Bank,
World Heritage Convention, GTZ, USAID, CIDA, government of Australia and others, and to develop new partnerships. This conference is an excellent place to start.

Acknowledgements
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References

1 Carey, Christine, Nigel Dudley and Sue Stolton (2000); Squandering Paradise? The importance and vulnerability of the world’s protected areas, WWF and IUCN, Gland