

Evaluating Management Effectiveness

Introduction

The new EU biodiversity strategy for 2030 commits to effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately by 2030 (EC, 2020). The European Environmental Agency (EEA, Oct 2020) concludes in its reporting on management effectiveness of EU's Natura 2000 network that management effectiveness standards are insufficiently known and understood among practitioners. The Global Database on Protected Area Management Effectiveness (GD-PAME) reports that only 7.6 % of the recorded protected areas in the EU have been assessed.

To address this, more targeted capacity building and better EU guidance on managing management effectiveness of protected areas are needed. Understanding how well protected areas are managed, and therefore the extent to which they are achieving their goals and objectives, is fundamental, not only for the effective management of the sites themselves, but also for strategic planning and investment at system, national, regional and global level.

According to the EEA report a fundamental problem is that site-specific conservation objectives have not been set for some sites and many are insufficiently specific and measurable. Other deficiencies include:

- lack of identified or established management objectives and measures, including monitoring systems
- gaps in knowledge and monitoring of key conservation values (i.e. the habitats and species for which the site is designated) and threats/pressures
- inadequate investment in the capacity of management authorities and in practical site management.

Evaluating Management Effectiveness has a clear link with the principles of Adaptive Management and with the use of the Management Project Cycle. Assessments can evaluate each stage of the management cycle, focusing on different questions and information. The outcomes of the evaluation on management effectiveness are supposed to feed back into an updated management planning and eventually in elaborating a new management plan.

What is PAME

Management effectiveness evaluation (PAME) is defined as *“the assessment of how well the protected area is being managed – primarily the extent to which it is protecting values and achieving goals and objectives. The term management effectiveness reflects three main themes:*

- *design issues relating to both individual sites and protected area systems;*
- *adequacy and appropriateness of management systems and processes; and*
- *delivery of protected area objectives including conservation of values.”*

(Hockings *et al.* 2006)

Four major purposes drive evaluation of management effectiveness . (Hockings *et al.* 2006). It can: a) lead to better management in a changing environment; b) assist in effective resource allocation; c) promote accountability and transparency; d) and help involve the community, build constituency and promote protected area values. The range of evaluation purposes combined with the great diversity of protected areas – with different values, cultural settings and management regimes – means that it is not practical to develop a single assessment tool.

Key to the success of evaluating management effectiveness is to integrate monitoring and evaluation into day to day management. Hence the fourth level of assessment consists of detailed monitoring and reporting on the condition and trend of specific protected area values such as animal populations, forest condition, cultural values and socioeconomic impacts.

In 2006 the second edition of the IUCN-WCPA Framework for Protected Areas Management Effectiveness was published. (Hockings *et al.* 2006) The Framework is not, in itself, a specific methodology for assessing effectiveness of management but a framework for developing assessment systems and guidance for the practice of evaluation. It is based on the idea that protected area management follows a process with six distinct stages, or elements (Figure 1):

- it begins with reviewing context and establishing a vision for site management (within the context of existing status and pressures),
- progresses through planning and
- allocation of resources (inputs), and
- as a result of management actions (process),
- eventually produces goods and services (outputs),
- that result in impacts or outcomes.

Figure 1. The IUCN WCPA framework for assessing management effectiveness of protected areas



Source: Hockings *et al.*, 2006.

Methodologies for directing, undertaking and reporting on such detailed studies in a systematic way to support adaptive management have been developed by groups such as the Nature Conservancy (Parrish *et al.* 2003) and park management agencies in Canada and South Africa (Timko and Innes 2009)

PAME approaches and methodologies usually consist of a combination of measures including assessments of resourcing, planning, management processes and output. Outcome measures are often also included in these assessments, but they are often qualitative estimates by staff or other experts, and are sometimes challenged as subjective and lacking in evidence.

Existing PAME approaches.

Integrated Management Effectiveness Tool

Under the BIOPAMA project the Integrated Management Effectiveness Tool (IMET) has been developed (<https://rris.biopama.org/node/18795>)

The main purpose of IMET is to support comprehensive PA planning, monitoring and evaluation with a view to improving PA management and to ensure that PAs meet their conservation objectives. Although IMET assessments include the evaluation of PA management effectiveness, the scope of IMET is much broader than that of some of the other PAME methodologies. IMET supports a proactive results based approach to adaptive PA management and provides a comprehensive decision support system for PA agencies and managers. IMET is supported by a computer-based application that collects, organizes and analyses data to facilitate informed decision-making for protected area management, operations and planning.

WWF-RAPPAM

Another method is the RAPPAM method (Rapid Assessment of Prioritization of Protected Areas Management) <https://wwfeu.awsassets.panda.org/downloads/rappam.pdf>

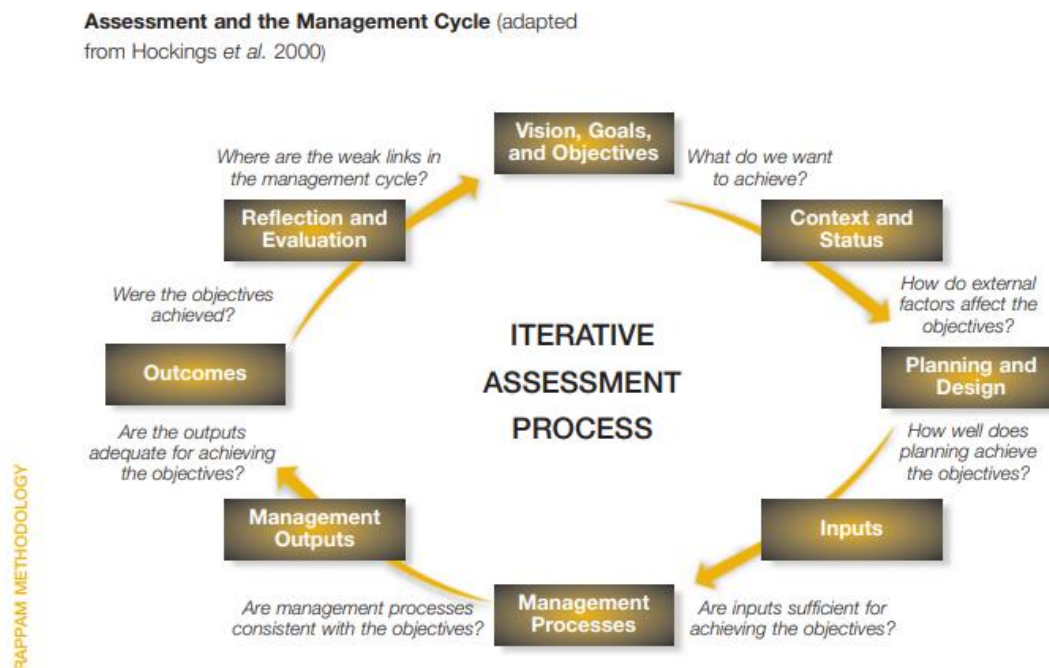
Rappam was developed for WWF's Forests for Life Programme that promotes the concept of viable networks of protected areas (PA) worldwide, representing a significant percentage of each of the world's forest types.

In general, the RAPPAM Methodology is designed for broad-level comparisons among many protected areas. The RAPPAM Methodology is not designed to provide detailed, site-level adaptive management guidance to protected area managers. An in-depth field assessment can answer detailed site-specific questions, such as the following: What specific steps are needed to prevent or mitigate existing threats within each protected area? What are the specific needs for each protected area regarding training, capacity building, and infrastructure support? How well is the protected area managing its specific biodiversity assets?

The most thorough and effective approach to implementing this methodology is to hold an interactive workshop or series of workshops in which protected area managers, policy makers, and other stakeholders participate fully in evaluating the protected areas, analysing the results, and identifying subsequent next steps and priorities.

Because the RAPPAM method is so clearly linked with the project management cycle (as illustrated by fig 2) RAPPAM evaluates each stage in the project management cycle including:

- a) vision, including goals and objectives, describing what the programme is trying to achieve
- b) assessment of how context – existing status, threats, and external factors – affects the ability to achieve the objectives
- c) assessment of the suitability of planning and design for achieving the objectives
- d) assessment of the adequacy of resources and inputs for achieving the objectives
- e) assessment of management processes, and their consistency with the objectives
- f) assessment of the management outputs, and their adequacy for achieving objectives
- g) assessment of the actual outcomes, and whether or not objectives were met
- h) reflection on the system as a whole, including an assessment of the weakest links and the most important areas for improvement



Recommendations from the EEA Report

The study compared assessment criteria for the IUCN Green List of Protected and Conserved Areas (GLPCA) against requirements under the nature directives. This shows that there are significant overlaps, in particular in management design and planning. Based on feed back from site managers the study provides recommendations for adaptation of the GLPCA assessment to accommodate the requirements of assessing management effectiveness of N2000 sites.

The indicators that would help to better assess the effectiveness of managing N2000 sites would include:

- governance vitality and capacity to respond adaptively
- the availability of long-term management strategies
- the management of threats
- the measurement and demonstration of the conservation of associated ecosystem services and cultural values.

The GLPCA set of indicators is peer reviewed and provides the most comprehensive and up-to-date approach based on established systems. Applying it systematically at site level would therefore certainly improve insight into Natura 2000 management effectiveness. Of the 50 indicators, 25 do not currently explicitly adhere to the requirements of the nature directives. More importantly, using the GLPCA approach in each Natura 2000 site would require significant resources. Some respondents to the questionnaire indicated that such resources are currently not available for many sites. However, to obtain a better insight on progress in terms of implementation and common barriers to and opportunities for improving effectiveness, the EEA analysis identified eight criteria that are the most relevant to report on. These are outlined in Table 3.

Component/Criterion	Indicator	BHD requirement
Good governance (Vitality and capacity to respond adaptively)	Procedures are in place to ensure that results from monitoring, evaluation and consultation are used to inform management and planning processes, including establishing goals and objectives	Yes
Good governance (Vitality and capacity to respond adaptively)	Planning and decision-making recognise relevant conditions, issues and goals at national and regional scales that affect the protected area	Yes
Effective management (Long-term management strategy)	The site demonstrates that management activities and policies and/or legislation and regulations are being implemented and are consistent with the management plan (or equivalent)	Yes
Effective management (Long-term management strategy)	The site has adequate numbers of appropriately trained staff provided by the responsible entity and properly supervised to implement all aspects of its management plan or equivalent in the long term	No
Effective management (Long-term management strategy)	Financial constraints are not threatening the capacity of management to achieve the site's objectives	No
Effective management (Manage threats)	The site management is implementing a work programme that identifies effective responses to each of the major pressures and threats to target habitat types and species and the ecological coherence of the site, as well as other major site values	Yes
Effective management (Measure success and impact)	A threshold level has been specified for each set of performance measures relating to natural values that, if achieved, demonstrate objectively that the associated major site value is being successfully conserved. Threshold determination can include the assessment of conservation impact based on change in major values over a specified period compared with those anticipated without the protected and conserved area	Yes
Conservation outcomes (Demonstrate conservation of natural values)	The site meets or exceeds (agreed) performance thresholds for the conservation of major natural values	No

Note: BHD, Birds and Habitat Directives.

The EEA report recommends on better, earlier and more frequent and bottom-up stakeholder participation in and training on management effectiveness. More practical peer-to-peer exchanges between regional authorities and site managers are presented as an option.

The challenge is to develop a cost effective way to improve management effectiveness reporting of N2000 sites. In particular, this should consider criteria that track the following for each Natura 2000 site:

- Established conservation objectives have been adopted and for what proportion of features.
- Management requirements and measures have been identified.
- Management measures are in place (e.g. under management agreement).
- Investment needs are met.
- PAME assessment is undertaken.

This information could be included in the site management section of the standard data form and updated annually by competent authorities

Additional information and literature

- EEA Briefing no. 11/2020. Title: **Management effectiveness in the EU's Natura 2000 network of protected areas** PDF - TH-AM-20-012-EN-N - ISBN 978-92-9480-281-1 - ISSN 2467-3196 - doi: 10.2800/717133; <https://www.eea.europa.eu/publications/management-effectiveness-in-the-eus>
- Evaluating Effectiveness; A Framework for Evaluating Management Effectiveness of Protected Areas, 2nd edition. <https://portals.iucn.org/library/efiles/documents/pag-014.pdf>
- <https://panorama.solutions/en/solution/closing-gap-between-strategic-and-operational-planning-protected-areas>
- CBD on Protected Areas Management Effectiveness; <https://www.cbd.int/protected-old/PAME.shtml#:~:text=IUCN-WCPA%20has%20developed%20a,evaluation%20systems%20for%20protected%20areas.&text=Management%20starts%20with%20planning%20of,protection%20and%20to%20reduce%20threats.>
- WWF Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) Methodology; <https://wwfeu.awsassets.panda.org/downloads/rappam.pdf>