

Protected Areas Management Effectiveness Information Module

Methodology Description

Rapid Assessment and prioritization of protected area management (RAPPAM)

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1.1 Organisation

WWF

1.2 Primary methodology reference

Ervin, J. (2003b) WWF: Rapid Assessment and prioritization of Protected Area Management (RAPPAM) Methodology. WWF Gland, Switzerland WWF (no date) 'Metodología para la evaluación y priorización rápidas del manejo de áreas protegidas (RAPPAM).' WWF.

1.3 Brief description of methodology

The RAPPAM methodology is designed for broad-level comparisons among many protected areas which together make a protected areas network or system. It can:

- Identify management strengths, constraints and weaknesses.
- Analyse the scope, severity, prevalence and distribution of a variety of threats and pressures.
- Identify areas of high ecological and social importance and vulnerability.
- Indicate the urgency and conservation priority for individual protected areas.
- Help to develop and prioritise appropriate policy interventions and follow-up steps to improve protected area management effectiveness.

It can also answer a number of important questions:

- What are the main threats affecting the protected areas system, and how serious are they?
- How do protected areas compare with one another in terms of infrastructure and management capacity? And how do they compare in effectively producing outputs and conservation outcomes as a result of their management?
- What is the urgency for taking actions in each protected area?
- What are the important management gaps in the PA system.
- How well do national and local policies support the effective management of protected areas? Are there gaps in legislation and what are the governance improvements that are needed?
- What are the most strategic interventions to improve the entire system?

Higgins-Zogib and Lacerda (2006)

1.4 Purposes

- ✓ **for prioritisation and resource allocation**
- ✓ to raise awareness and support
- ✓ to improve management (adaptive management) – at system level

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1.5 Objectives and application

RAPPAM provides policy makers and protected area authorities with a relatively quick and easy method to identify major trends and issues that need to be addressed for improving management effectiveness in any given *system* or group of protected areas. Through conducting RAPPAM assessments, authorities responsible for managing systems of protected areas have been able to

- analyse the range of major threats facing their protected areas system and to get a broad overview of the most pressing management issues they face;
- look at how the system or group as a whole is functioning and performing; and
- to agree on needed corrective steps that will lead to improved system-level management effectiveness.

RAPPAM has been implemented in some 40 countries and over 1000 protected areas in Europe, Asia, Africa and Latin America and the Caribbean. Useful reports of the status of protected area systems or groups are produced (see list of references at the end of this section), suggesting priority protected areas in terms of the values and vulnerabilities and analysing the trends in protected area management issues.

1.6 Origins

The system was designed originally to assess networks of protected areas. It is based on the WCPA PAME Framework. It was developed by WWF between 1999 and 2002, with field testing in China, France, Cameroon Algeria and Gabon.

1.7 How the methodology is implemented

The following material has been extracted from Higgins-Zogib and Lacerda (2006, p.59)

‘There are five steps in the RAPPAM process:

- Determine the scope of the assessment;
- Assess existing information for each protected area;
- Administer the RAPPAM questionnaire;
- Analyse the findings; and
- Identify next steps and recommendations.

In general 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.

RAPPAM workshops usually take three days. Two-day workshops have been held, but in these cases the agenda has been very tight with little time available for group and plenary discussions. The costs depend largely on where the workshop is held. Where possible it is advisable to hold the workshop inside a protected area as many of the discussion points during the workshop will be represented right outside the door. However, these logistics are usually the choice of the government ministry (or other protected area authority), who will be the lead player in the workshop.

Getting the right participants to the workshop is critical – and the broader the stakeholder group present, the more true the results. It is important to have at least the manager of each park present at the workshop, as well as top-level participation from the appropriate government ministry. If deemed appropriate, donors can be invited, in the hope that they engage in helping with follow-up steps, as can other international and local NGOs present in

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the country or region. This helps build support for implementing recommendations that stem from the workshop. Other stakeholders such as community representatives, tourism operators and university staff strengthen the results. And even if in the end, there is disagreement between park staff and community members for example, points raised by the community can still be reflected in the RAPPAM report and taken into consideration.

Lessons learned

- Ensure the government protected area authority leads the assessment process.
- Develop partnerships with other NGOs present in the country or region.
- Choose a useful assessment scope: RAPPAM is seen at its best when a larger number of protected areas are included in the assessment.
- Administer the questionnaire through interactive workshops.
- Think carefully about assessment objectives and adapt the method to local needs:
- Launch the report at an event if possible.
- Make clear, concrete, do-able recommendations.
- Ensure participation and engagement of local communities and other relevant stakeholders in assessments, but plan carefully for their input.’

1.8 Elements and indicators

The questionnaire begins with introductory context questions on values and threats/vulnerability, followed by questions aimed at the protected area level and the system level. Questions are divided into a number of headings.

Table 1: Indicators for the RAPPAM methodology

WCPA Elements	Sections	Questions
	1. Background	includes specific management objectives and critical management activities
Context	2. Pressures and threats	including trend, extent, impact, permanence, and probability of past and future threats
Context	3. Biological importance	Number of rare, threatened or endangered species Relative level of biodiversity Degree of endemism Critical landscape function Extent of full range of plant and animal diversity Contribution to the representativeness of PA system Minimum viable populations of key species Consistency of structural diversity with historic norms Historic range has been greatly diminished ecosystems Extent of full range of natural processes and disturbance regimes
Context	4. Socio-economic importance	Employment for local communities Dependence of communities on PA resources for their subsistence Community development opportunities through sustainable resource use Religious or spiritual significance Unusual aesthetic features Plant species of high social, cultural or economic importance Animal species of high social, cultural or economic importance Recreational value Ecosystem services and benefits to communities Educational and/or scientific value

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WCPA Elements	Sections	Questions
Context	5. Vulnerability	<p>Low law enforcement</p> <p>Common bribery and corruption</p> <p>Civil unrest and/or instability</p> <p>Conflicting cultural practices, beliefs and traditional uses</p> <p>High market value of PA resources</p> <p>Accessibility for illegal activities</p> <p>Demand for vulnerable resources</p> <p>Pressure to unduly exploit resources</p> <p>Difficult recruitment and retention of employees</p> <p>Difficulty in monitoring illegal activities within the PA</p>
Planning	6. Objectives	<p>PA objectives provide for the protection and maintenance of biodiversity.</p> <p>Specific biodiversity-related objectives are clearly stated in the management plan.</p> <p>The management policies and plans are consistent with the PA objectives.</p> <p>PA employees and administrators understand the PA objectives and policies.</p> <p>Local communities support the overall objectives of the PA</p>
Planning	7. Legal security	<p>The protected area has long-term legally-binding protection.</p> <p>There are no unsettled disputes regarding land tenure or use rights.</p> <p>Boundary demarcation is adequate to meet the PA objectives.</p> <p>Staff and financial resources are adequate to conduct critical law enforcement activities.</p> <p>Conflicts with the local community are resolved fairly and effectively</p>
Planning	8. PA site design and planning	<p>The siting of the PA is consistent with the PA objectives.</p> <p>The layout and configuration of the PA optimises the conservation of biodiversity.</p> <p>The PA zoning system is adequate to achieve the PA objectives.</p> <p>The land use in the surrounding landscape enables effective PA management.</p> <p>The protected area is linked to another area of conserved or protected land</p>
Inputs	9. Staff	<p>The level of staffing is sufficient to effectively manage the area.</p> <p>Staff members have adequate skills to conduct critical management activities.</p> <p>Training and development opportunities are appropriate to the needs of the staff.</p> <p>Staff performance and progress on targets are periodically reviewed.</p> <p>Staff employment conditions are sufficient to retain high-quality staff.</p>
Inputs	10. Communication and information inputs	<p>There are adequate means of communication between field and office staff.</p> <p>Existing ecological and socio-economic data are adequate for management planning.</p> <p>There are adequate means of collecting new data.</p> <p>There are adequate systems for processing and analysing data.</p> <p>There is effective communication with local communities.</p>

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WCPA Elements	Sections	Questions
Inputs	11. Infrastructure	<p>Transportation infrastructure is adequate to perform critical management activities.</p> <p>Field equipment is adequate to perform critical management activities.</p> <p>Staff facilities are adequate to perform critical management activities.</p> <p>Maintenance and care of equipment is adequate to ensure long-term use.</p> <p>Visitor facilities are appropriate to the level of visitor use.</p>
Inputs	12. Finances	<p>Funding in the past 5 years has been adequate to conduct critical management activities.</p> <p>Funding for the next 5 years is adequate to conduct critical management activities.</p> <p>Financial management practices enable efficient and effective PA management.</p> <p>The allocation of expenditures is appropriate to PA priorities and objectives.</p> <p>The long-term financial outlook for the PA is stable.</p>
Process	13. Management planning	<p>There is a comprehensive, relatively recent written management plan.</p> <p>There is a comprehensive inventory of natural and cultural resources.</p> <p>There is an analysis of, and strategy for addressing, PA threats and pressures.</p> <p>A detailed work plan identifies specific targets for achieving management objectives.</p> <p>The results of research and monitoring are routinely incorporated into planning</p>
Process	14. Management decision-making practices	<p>There is clear internal organisation.</p> <p>Management decision making is transparent.</p> <p>PA staff regularly collaborate with partners, local communities and other organisations.</p> <p>Local communities participate in decisions that affect them.</p> <p>There is effective communication between all levels of PA staff and administration</p>
Process	15. Research, monitoring, and evaluation	<p>The impact of legal and illegal uses of the PA are accurately monitored and recorded.</p> <p>Research on key ecological issues is consistent with the needs of the PA.</p> <p>Research on key social issues is consistent with the needs of the PA.</p> <p>PA staff members have regular access to recent scientific research and advice.</p> <p>Critical research and monitoring needs are identified and prioritised.</p>
Outputs	16. Outputs	<p>Threat prevention, detection and enforcement</p> <p>Site restoration and mitigation efforts</p> <p>Wildlife or habitat management</p> <p>Community outreach and educational efforts</p> <p>Visitor and tourist management</p> <p>Infrastructure development</p> <p>Management planning and inventorying</p> <p>Staff monitoring, supervision and evaluation</p> <p>Staff training and development</p> <p>Research and monitoring outputs</p>

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System-level questions	17. Protected area system design	<p>The PA system adequately represents the full diversity of ecosystems within the region.</p> <p>The PA system adequately protects against the extinction or extirpation of any species.</p> <p>The PA system consists primarily of exemplary and intact ecosystems.</p> <p>Sites of high conservation value for key species are systematically protected.</p> <p>The PA system maintains natural processes at a landscape level.</p> <p>The PA system includes the protection of transition areas between ecosystems.</p> <p>The PA system includes the full range of successional diversity.</p> <p>Sites of high biodiversity are systematically protected.</p> <p>Sites of high endemism are systematically protected.</p> <p>The layout and configuration of the PA system optimises the conservation of biodiversity</p>
System-level questions	18. Protected area policies	<p>National PA policies clearly articulate a vision, goals and objectives for the PA system. The area of land protected is adequate to maintain natural processes at a landscape level.</p> <p>There is a demonstrated commitment to protecting a viable and representative PA network.</p> <p>There is a comprehensive inventory of the biological diversity throughout the region.</p> <p>There is an assessment of the historical range of variability of ecosystem types in the region.</p> <p>There are restoration targets for underrepresented and/or greatly diminished ecosystems.</p> <p>There is ongoing research on critical PA-related issues.</p> <p>The PA system is periodically reviewed for gaps and weaknesses (e.g. gap analyses).</p> <p>There is an effective training and capacity-building programme for PA staff.</p> <p>PA management, including management effectiveness, is routinely evaluated.</p>
System-level questions	19. Policy environment	<p>PA-related laws complement PA objectives and promote management effectiveness.</p> <p>There is sufficient commitment and funding to effectively administer the PA system</p> <p>Environmental protection goals are incorporated into all aspects of policy development.</p> <p>There is a high degree of communication between natural resource departments.</p> <p>There is effective enforcement of PA-related laws and ordinances at all levels.</p> <p>National policies promote widespread environmental education at all levels.</p> <p>National policies promote sustainable land management.</p> <p>National policies promote an array of land conservation mechanisms.</p> <p>There is adequate environmental training for governmental employees at all levels.</p> <p>National policies foster dialogue and participation with civic and environmental NGOs</p>

1.9 Scoring and analysis

Most questions use a standard 4-selection scale (no=0, mostly no=1, mostly yes=3, yes=5), where 'yes' describes an ideal situation. Threats (vulnerability) are rated according to their extent, impact and trend.

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Analysis of the data is usually presented as comparisons among the sites in the protected area system. Many different analyses are presented in the reports. Important outputs include lists and graphs of the most common threats, management strengths and management weaknesses; prioritisation of parks with respect to their vulnerability and importance; and other comparative information about specific aspects of management.

1.10 Further reading and reports

See reference list for full referencing of the following reports in the bibliography or refer to the WWF Website:

(Anonymous no date; Department of Forests and Wildlife Sikkim and WWF India 2003; Diqiang *et al.* 2003; Duguman 2006; Ervin 2003a; Ervin 2004a; b; Goodman 2003; Higgins-Zogib 2004; Higgins-Zogib and Lacerda 2006; Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis and WWF-Brasil 2007; Lacerda *et al.* 2004; Ministry of Natural Resources and the Environment 2006; Nemekhjargal and Belokurov 2005; Nepali 2006; Simões 2005; Simoes and Numa de Oliveria 2003; Stanciu and Steindlegger 2006; Steindlegger and Kalem 2005; Tacón *et al.* 2005; Tshering 2003; Tyrlyshkin *et al.* 2003; WWF 2001; 2004; no date; WWF India 2006)

Download the RAPPAM methodology in [English](#), [Spanish](#) or [Portuguese](#).

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