Scenery matrix

Written with editorial input from Helder de Faria

1.1 Organisation/ Affiliation

São Paulo Forestry Institute (IF-SP), Secretaria de Meio Ambiente do Estado de São Paulo

1.2 Primary reference

De Faria, Helder Henrique (2004) Eficácia de Gestão de Unidades de Conservação Gerenciadas pelo Instituto Florestal de São Paulo, Brasil. Tese de doutoramento. Depto. Geografia. UNESP. Presidente Prudente, SP. 401p.

1.3 Brief description of methodology

The Scenery Matrix methodology is designed primarily for the assessment of systems of protected areas. It is simple to be applied and potentially could be widely used. The data is collected through a participatory process and it is flexible, i.e., it allows the protected area representatives to propose their own set of indicators according to the protected area current situation and optimum scenario. By making use of a standardised scoring scale, the management efficiency is then measured by comparing an 'optimum protected area scenario' with the current situation.

1.4 Purposes

✓ **to improve management (adaptive management)**

1.5 Objectives and application

It was developed to assess protected area management efficiency and it is appropriate for the assessment of a large number of protected areas. This system is based on the use of pre-selected indicators (in accordance with the protected area management objectives) and the design of an optimum scenario for each indicator, which is associated to a standard scale. It was applied by the developer on 59 protected areas in the state of São Paulo (southeast of Brazil) from 2000 to 2004. In order to trial the indicators, this methodology was tested by the author in 1998 in a total of 12 protected areas in the same state (de Faria 1998).

1.6 Origins

The Scenery Matrix was conceived as an academic exercise (PhD thesis) and was developed using as basic reference the methodology originally developed by de Faria (1993), which was later improved by other researchers and published as a manual by Cifuentes, Izuerieta and de Faria (2000a).

1.7 How the methodology is implemented

The methodology is based on the application of questionnaires filled out by protected area representatives in workshops, on interviews with the protected area directors, and on visits to the protected areas to be assessed and on the revision of secondary data (from different sources).

1.8 Elements and indicators

This methodology is based on the use of indicators previously selected, which are defined in accordance to the management objectives of the protected areas to be assessed, and the definition of optimum and current scenarios for each indicator and their association to a standard scale.

The indicators are qualified based on the pre-defined scenarios, the criteria established for the indicator assessments, and a standardized scale for its quantification, where the higher score corresponds to the 'optimum scenario' and the lowest one to the worst possible situation that can happen in the system, the one that is completely in conflict with the protected area management.

For each indicator the protected area representative had to choose one alternative that represented the reality in his/her protected area. In case the alternatives available were not representing the reality of his/her protected area, the representative could describe the current and the 'optimum' scenario of the protected area and suggest new quality descriptors that would be then integrated to the questionnaire used on the assessment**.**

The indicators are described below. They were used as a basis for further discussion in collective assessment meetings and on field analysis.

Indicators in the Scenery Matrix methodology

Administration	Administrator	Staff body Quantity Staff Quality Staff Motivation Attitudes Presentation
	Financing	Operational Financing Extra Financing Regularity on resource delivery
	Resources Generation / Organisation	Archive Organogram Internal communication Normatisation
	Infrastructure	Basic infrastructure Special Infrastructure Salubrity Security
	Equipment and Materials	
	Limits demarcation	
Planning	Management Plan	Existence and update Planning team Method Plan execution
	Planning level	Annual operational plan
	Area zoning	
	Resource use compatibility (legal and illegal)	Recreation Tourism Education Fishing Logging Agriculture Cattle ranching Others
	Management programmes (Existence and execution)	Public use Research Protection Maintenance

Source: Leverington *et al.,* 2008. 'Management Effectiveness evaluation in protected areas – a global study. Supplementary Report No1: Overview of approaches and methodologies.' The University of Queensland, Gatton, TNC, WWF, IUCN-WCPA, AUSTRALIA.

Politic-legal	Community support and participation	
	Intra-institutional support	
	Inter-institutional support	
	Creation diploma	
	Tenure situation	
	Support to staff	
	Capacity-building	
	Norms application and fulfilment	
Resource quality	Size	
	Shape	
	Insulation	
	Altered areas	
	Integrity of catchments	
	PA resource exploitation	
	Compatibility between the use of surrounding areas and PA objectives.	
	Threats	
Knowledge	Socio-economic information	
	Biophysical information	
	Cartographic information	
	Legal information	
	Researches and projects	
	Monitoring and feedback	
Forest Management (State PA)	Continuous management	
	Inventory	Existence, update and use
	Improved forests	
	Productivity	
	Phytosanity	

1.9 Scoring and analysis

The determination of the management efficiency is obtained by integrating and comparing the qualitative results, synthesised in a double entrance matrix. The sum of the highest possible scores for each indicator (value 4) results in a value defined as 'total optimum', which corresponds to 100% of the possible value to be achieved. The sum of the scores obtained from the analysis of the indicators' current situation results in a value defined as 'total achieved'. A proportional comparison between these two sums generates a percentage value that is then correlated to an evaluation scale, which defines the level of management quality. For protected area systems assessments, the same process can be used for determining the degree of policy application and institutional management efficiency.

The protected area situation is described by attributing a value from 0 to 4, according to the following scoring scale:

Score	Relationship between the optimum and the current indicator situation	Quality of indicador
0	0 – 35%	Unsatisfactory or a very inferior standard
1	36 – 50%	Barely satisfactory or inferior standard
2	51 – 75%	Moderately satisfactory or medium standard
3	76 – 90%	Satisfactory
4	91 – 100%	Very satisfactory or excellent standard

Source: Leverington *et al.,* 2008. 'Management Effectiveness evaluation in protected areas – a global study. Supplementary Report No1: Overview of approaches and methodologies.' The University of Queensland, Gatton, TNC, WWF, IUCN-WCPA, AUSTRALIA.