

Visitor flows indicators used in Italian protected area management effectiveness methodology (MEVAP) and data base on National Protected Areas: how to improve their efficacy?

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The aim of this paper is highlight how MEVAP methodology (Banini et al, 2006) can be implemented in order to evaluate and monitor management effectiveness of protected areas (PAME) through a series of indicators. The approach focuses on tourism management as the core part of the field survey. Developed in Italian protected areas, the framework takes into account the instructions and recommendations from national and international policies on bio-diversity and sustainable development (General policy law n° 394/1991, CBD, Natura 2000 Network international rules, etc.). Management effectiveness of protected areas at European level presents differences between countries: a first step analysis was run off by a seminar held in Vilm Island in 2008 (Stolton, 2008) and repeated last November by the organization of German Federal Agency on Environment Protection.

The methodology allows:-

- A macro-level assessment of protected area management: the achievement of national goals and objectives in observance of international treaties and national strategies.
- A micro-level assessment of protected area management: developing methods and criteria in order to diffuse the Best Practice arising from the assessment of local management systems.

The criteria used for selecting indicators are:

- Ease of collection
- Quantification
- Representativeness
- Scientific relevance
- Transferability.

The evaluation of management effectiveness is achieved through the assessment of a set of selected indicators. Indicators are associated with 4 domains: environment, economy, governance, and society.

The Handbook is a scientific tool designed to be flexible and accessible to different needs and contexts. It is made up of a wide range of 70 indicators which have been divided into core and supplementary groups.

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The set of indicators can be adapted and used in different circumstances and contexts:

- Evaluation or self-evaluation of protected areas management effectiveness.
- Providing support for Best Practice diffusion.
- Supporting different environmental procedures and programs such as ISO 14001, EU Eco-Management and Audit Scheme (EMAS) and Agenda 21 or State of the Environment Reports.
- Sector studies concerning protected areas (tourism, agriculture, etc.).
- Supporting procedures for Environment Balance and/or Sustainability Balance.

Table 1: Every domain is related with macro-objectives and topics.

Domain	Macro-objective	Topic	Indicator
Environment	Resource Conservation (CBD)	Bio-diversity	Levels of threat to animal species
Economy	Reconversion of productivity and promotion of sustainable activities (L. 394/91)	Δ+ products with quality certification	Presence of trademark
Governance	Development of economic management capacity	Park as a generator of creative projects	Promotion of international co-operation
Society	Access and benefit-sharing of genetic resources (CBD)	Access to benefits	Local residents' perception of benefits

The MEVAP Survey Handbook helps to investigate into the touristic Park's accommodations (private and public) and their quality and certification (waste recycling, organic farming and local products use, clean energy production system); the core indicators are specific regarding visitors flow and their satisfaction about services. The main core indicators are:

- E6: Touristic intensity (number of visitors/resident population) and a temporal concentration index
- E11: Sustainable mobility
- S6: Satisfaction visitor degree.

The on-desk analysis about visitor flows will be carried out through a data base built by the University of Molise, which contains national data at municipally level for the National Park areas. The data base allows the study of the increasing or decreasing of bed places or the ratio of visitors to bed places, making time series in order to understand the evolution of tourism in a specific territory.

The complexity of the tourism sector determined the coexistence of many sources of information, each one created with specific finality and addressed to particular segment (tourism demand, tourist offer, transport, etc.) which leave aside important aspects related to the link between tourism and local products, its impact on the territory, etc. Moreover, the plurality of data available does not allow the comparison; results are redundant in such cases, deficient in others (Gismondi & Mirto 2003). Studying tourism in its integration with territory (aiding the relation with environment, economy and society) leads to methodological problems related to the lack of a homogeneous information system of data. MEVAP methodology represents an attempt to work on analysing the relation between tourism and territory – where protected areas constitute a specific area, with the problem of definition of their boundaries - through the integration in demographic and economical indicator of relations, direct and indirect ones, with tourism.

The main objective is to test the indicators and find the ones that are most efficient using different methodologies of acquisition. Management effectiveness evaluation is defined as the assessment of how well protected areas are being managed and visitor flows are a core part of the field survey. The work intends to highlight issues related to studying tourism in protected areas from a methodological point of view, and investigating sustainability of tourism as well.

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