Metodología de Evaluación de Efectividad de Manejo (MEMS) y SMAP del SNAP de Bolivia

Information on this methodology has not been confirmed.

1.1   Organisation/ Affiliation

SERNAP – Servicio Nacional de Áreas Protegidas (Protected Areas National Service)

1.2   Primary references

Guachalla MCZOP and Zegada, JA (2001) 'Metodología medición de la efectividad del manejo del SNAP (MEMS).' Ministerio de Desarrollo Sostenible, Servicio Nacional de Áreas Protegidas de Bolivia (SERNAP), La Paz, Bolivia.

Guachalla MCZOP, Zegada, JA and Cadima, FM (2002) 'Metodología medición de la efectividad del manejo del SNAP (MEMS).' Ministerio de Desarrollo Sostenible, Servicio Nacional de Áreas Protegidas de Bolivia (SERNAP), La Paz, Bolivia.

DMA-SERNAP (2005) Sistema de Monitoreo de Areas Protegidas.

1.3   Brief description of methodology

SERNAP Bolivia has established two interlinked systems for monitoring and evaluation of protected areas:

- The MEMS methodology measures management effectiveness by evaluating certain aspects of the protected areas consolidation. It is not specifically about the conservation and management measures of a specific program, project or donor. It does not measure the success of a protected area in biodiversity conservation, threat reduction, or other critical aspects of conservation. MEMS is part of the integrated monitoring system discussed below (Oetting 2006).

- The Integrated Monitoring System for the Conservation of the Protected Areas – SMAP (Sistema de Monitoreo Integral para a Conservación en Áreas Protegidas) has five components:
     1) conservation targets;
     2) human activities;
     3) socio-economic dynamics;
      4) socio-political conflicts; and
     5) protected area management.(MEMS).

Each component has its set of indicators which are meant to be easy and possible to monitor, useful and of low cost (DMA-SERNAP 2005).

The integrated monitoring system is a tool to support protected area management. It allows information to be organised according to priorities and the users. It is a model for monitoring environmental processes and the interactions between society and environment and classifies the environmental problems in terms of cause and effect. The general objective of the system is to provide a tool to monitor the dynamics of protected areas to support the achievement of their objectives.

Threats define the monitoring priorities. The model pressure-state-response to monitor the interactions between natural resources and socio-economic activities is used to structure the indicators.

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

1.5   Objectives and application

According to Cracco *et al.* (2006b), the objective of MEMS is to provide a rapid revision of the level of consolidation of some relevant themes of the management of the protected areas of the national system and identify priorities to work with in the system level.

The methodology has been applied to parks in Bolivia in 2001 and 2002 (Guachalla and Zegada 2001; Guachalla *et al.* 2002). Changes in individual protected areas were observed over time.

1.6   Origins

The MEMS methodology consists of annual evaluation of the protected area management consolidation level. It is part of the national protected area system, and guided by a score table or scorecard. SERNAP designed a score table which is an adaptation of the Parks in Peril Site Consolidation Scorecard and defined evaluation criteria according to the Bolivian protected area system. The adaptation adds other indicators and develops sub-indicators adapted to the Bolivian conditions(Oetting 2006).

The first evaluation took place in 2000, as an self-assessment of the protected area management by their own staff. The methodology evolved with the improvement and complementation of the indicators in the period 2001-2002, to make the tool more objective, adding indicators of inter institutional coordination, integration of the protected areas management with municipality governments, financial management effectiveness and a more specific description of the ranking of value of the indicators.

1.7   Strengths

MEMS is based on the Site Consolidation Scorecard so shares its benefits. It is specifically adapted to the Bolivian protected area management context.
- The information generated helps to assess each protected area management, identifying progress since the protected area consolidation;
- Identifies the critical aspects on the management of the SNAP (Protected Areas National System); and
- Identifies financial gaps on each protected area management and on the system of protected areas.

According to (DMA-SERNAP, 2005), the Integrated Monitoring System has the following advantages:
- it helps to make the protected area management a dynamic process
- it is a permanent process to evaluate the objectives and results of planning periodically and take corrective measures whenever appropriate
- it strengthens the image of the protected area with the local population by allowing to visualize the information.

If regular evaluations can integrate the two systems, it will achieve a comprehensive and systematic evaluation of management effectiveness.

1.8 Constraints and weaknesses

- Its implementation requires long time and staff dedication and since the information is qualitative, it complicates in part its automatic entry.
- The information is generated at a macro level, without discussing the quality of the assessed elements and its contents.
- It measures a group of protected areas with same parameters, without differing the particularities of each protected area management.

(Cracco *et al.* 2006)

The system is not yet completely institutionalised.

1.9 Elements and indicators

MEMS is based on indicators and sub-indicators which are averaged in function of the scoring established in a rank. The rank varies from 1 to 5 and each level of the rank is related to a percentage. **Error! Reference source not found.** shows the indicators (sub-indicators are not shown).

Indicators for the MEMS methodology

	Indicator
A. Basic protection activities	Infrastructure and Equipments
	Institutional Capacity
	Capacity
	Land Tenure
	Threats analysis
	Legal Status
B. Long-term management	Protection Plan
	Biodiversity inventory
	Biodiversity monitoring system
C. Long-term financial management	Operational budget
	Regularity of resources
	Capacity for financial management
	Capacity for long-term financial planning
D. Social participation	Established and ongoing management committee
	Levels of coordination among institutions
	Relationship with municipal governments
	Relationship with the "Prefecturas Departamentales"

1.10 Scoring and analysis

The scoring levels vary from 5 (optimum level) to 1 (deficient level). The scores are determined as follows:

Level 5: 81 – 100% (optimum level)
Level 4: 61 – 80% (good level)
Level 3: 41 – 60% (regular level)
Level 2: 21 – 40% (non-satisfactory level)
Level 1: 0 – 20% (deficient level)

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.